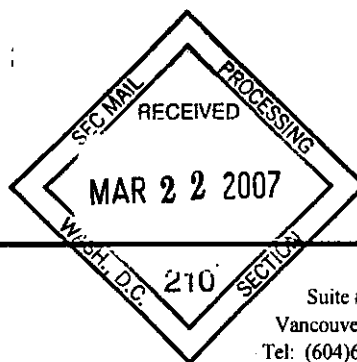


# BERUSCHI & COMPANY

Barristers & Solicitors

Anthony J. Beruschi B.Sc., LL.B.



Suite #501 - 905 West Pender Street  
Vancouver, British Columbia, V6C 1L6  
Tel: (604)669-3116 Fax: (604)669-5886  
E-Mail: [gwegner@beruschi.com](mailto:gwegner@beruschi.com)

March 20, 2007



Securities & Exchange Commission  
Division of Corporate Finance  
Room 3026, 450 Fifth Street N.W.  
Washington, DC 20549

**SUPPL**

**Attention: Office of International Corporate Finance**

Dear Sirs/ Mesdames:

**Re: ULTRA URANIUM CORP. (the "Issuer")  
Filing of documents under Rule 12g3-2(b),  
Securities Act of 1934  
File No. 82-1669**

**PROCESSED**

**APR 11 2007**

**THOMSON  
FINANCIAL**

With respect to the Issuer's exemption pursuant to Rule 12g3-2(b) promulgated under the *Securities Act* of 1934, we submit for recording the following documents that were filed, published or distributed to security holders since February 13, 2007:

- A. Copy of the Issuer's Annual Report on Form 6 as of February 2, 2007.
- B. Copy of news release issued during the relevant period.
- C. Copy of Exempt Distribution Report (Form 45-106F1) filed with the British Columbia and Ontario Securities Commissions.
- D. Copy of Material Change Report (Form 51-102F3) filed with the British Columbia and Alberta Securities Commissions.
- E. Copy of NI 43-101 Technical Report filed with the British Columbia and Alberta Securities Commissions.

BEST AVAILABLE COPY

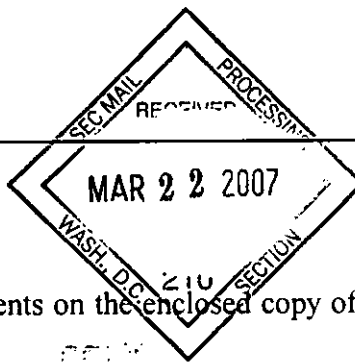
*Law 4/5*

**BERUSCHI & COMPANY**

---

March 20, 2007

Page 2



Please acknowledge receipt of these documents on the enclosed copy of this letter and return it in the enclosed self-addressed envelope.

Sincerely,

**BERUSCHI & COMPANY**

PER: 

**GWEN WEGNER**

Paralegal

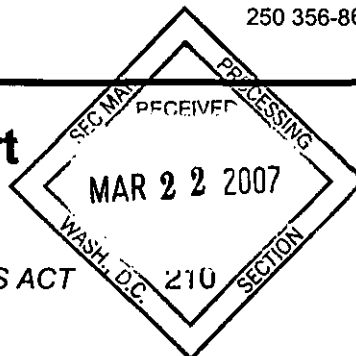
Enclosures

Date and Time: March 20, 2007 05:31 PM Pacific Time


**BRITISH  
COLUMBIA**
**Ministry of Finance**  
 Corporate and Personal  
 Property Registries  
[www.corporateonline.gov.bc.ca](http://www.corporateonline.gov.bc.ca)
**Mailing Address:**  
 PO BOX 9431 Stn Prov Govt.  
 Victoria BC V8W 9V3

**Location:**  
 2nd Floor - 940 Blanshard St.  
 Victoria BC  
 250 356-8626

**Annual Report**  
**BC COMPANY**

 FORM 6  
**BUSINESS CORPORATIONS ACT**  
 Section 51

*Filed Date and Time:*
**March 2, 2007 03:22 PM Pacific Time**
**ANNUAL REPORT DETAILS**
**NAME OF COMPANY**

 ULTRA URANIUM CORP.  
 501 - 905 WEST PENDER STREET  
 VANCOUVER BC V6C 1L6  
 CANADA

**INCORPORATION NUMBER**  
**BC0225795**
**DATE OF RECOGNITION**  
**February 2, 1981**
**DATE OF ANNUAL REPORT**  
 (ANNIVERSARY DATE OF RECOGNITION IN BC)  
**February 2, 2007**
**OFFICER INFORMATION AS AT February 2, 2007**
**Last Name, First Name, Middle Name:**

RIZZUTI, JOHN

**Office(s) Held:** (Secretary)

**Mailing Address:**

 4019 HOLLYRIDGE PLACE  
 VICTORIA BC V8N 5N8  
 CANADA

**Delivery Address:**

 4019 HOLLYRIDGE PLACE  
 VICTORIA BC V8N 5N8  
 CANADA

**Last Name, First Name, Middle Name:**

ROLAND, RAYMOND W.

**Office(s) Held:** (CEO, CFO, President)

**Mailing Address:**

305 - 1132 HARO STREET  
VANCOUVER BC V6Z 2M3  
CANADA

**Delivery Address:**

305 - 1132 HARO STREET  
VANCOUVER BC V6Z 2M3  
CANADA

---

**Last Name, First Name, Middle Name:**

WEGNER, GWEN

**Office(s) Held:** (Assistant Secretary)

**Mailing Address:**

36252 STEPHEN LEACOCK DRIVE  
ABBOTSFORD BC V3G 3C4  
CANADA

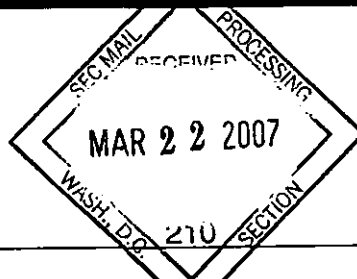
**Delivery Address:**

36252 STEPHEN LEACOCK DRIVE  
ABBOTSFORD BC V3G 3C4  
CANADA

---

# ULTRA URANIUM CORP

Trading Symbol: ULU  
 March 16, 2007  
 Tel: 604.682.7159  
 Toll Free: 1.888.880.2288



[www.ultrauranium.com](http://www.ultrauranium.com)  
 12g3-2(b): 82-1669  
 Standard & Poor's Listed  
[IR@ultrauranium.com](mailto:IR@ultrauranium.com)

## NEWS RELEASE

Ultra Uranium Corp. ("Ultra") (TSX.V-ULU) has issued 160,000 common shares to the property optionors of the Buck Lake Property pursuant to the amending agreement with the optionors dated December 22, 2006. The shares are restricted from trading until July 3, 2007. The shares were issued in lieu of the remaining cash payment to the optionors of \$150,000 which was due on or before January 31, 2007. The amending agreement has been accepted for filing by TSX Venture Exchange.

### ULTRA URANIUM CORP.

Per: "Raymond Roland"  
 Raymond Roland  
 President

#### For further information, please contact:

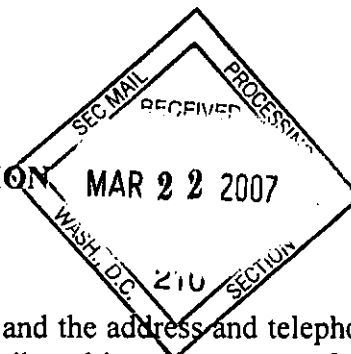
**Toronto:** Jason Monaco  
 First Canadian Capital  
 Bank of Montreal Building  
 155 Rexdale Blvd. Suite 309  
 Toronto, Ontario M9W 5Z8  
 Phone: 416.742.5600 / Fax: 416.742.6410  
[jmonaco@firstcanadiancapital.com](mailto:jmonaco@firstcanadiancapital.com)

**Vancouver:** Ultra Uranium Corp.  
 King George Building  
 501 - 905 West Pender Street  
 Vancouver, BC V6C 1L6  
 Toll Free: 1.888.880.2288  
 Phone: 604.682.7159 / Fax: 604.669.5886  
[IR@ultrauranium.com](mailto:IR@ultrauranium.com)  
[www.ultrauranium.com](http://www.ultrauranium.com)

*The TSX Venture Exchange has not reviewed and does not accept responsibility for the adequacy or the accuracy of this release. Cautionary Note to US Investors: This news release may contain information about adjacent properties on which we have no right to explore or mine. We advise U.S. investors that the SEC's mining guidelines strictly prohibit information of this type in documents filed with the SEC. U.S. investors are cautioned that mineral deposits on adjacent properties are not indicative of mineral deposits on our properties. This news release may contain forward-looking statements including but not limited to comments regarding the timing and content of upcoming work programs, geological interpretations, receipt of property titles, potential mineral recovery processes, etc. Forward-looking statements address future events and conditions and therefore involve inherent risks and uncertainties. Actual results may differ materially from those currently anticipated in such statements.*

FORM 45-106F1

REPORT OF EXEMPT DISTRIBUTION



Issuer information

1. State the full name of the issuer of the security distributed and the address and telephone number of its head office. If the issuer of the security distributed is an investment fund, state the name of the fund as the issuer, and provide the full name of the manager of the investment fund and the address and telephone number of the head office of the manager. Include the former name of the issuer if its name has changed since last report.

ULTRA URANIUM CORP.

Name of issuer

501 - 905 West Pender Street, Vancouver, BC, Canada V6C 1L6

Address

(604) 682-7159

Telephone Number

2. State whether the issuer is or is not a reporting issuer and, if reporting, each of the jurisdictions in which it is reporting.

The Issuer is a reporting issuer in British Columbia and Alberta.

3. Indicate the industry of the issuer by checking the appropriate box next to one of the industries listed below.

☐ Bio-tech

Financial Services

☐ investment companies and funds

☐ mortgage investment companies

☐ Forestry

☐ Hi-tech

☐ Industrial

Mining

☒ exploration/development

☐ production

☐ Oil and gas

☐ Real estate

☐ Utilities

☐ Other (describe)

Details of distribution

4. Complete Schedule I to this report. Schedule I is designed to assist in completing the remainder of this report.
5. State the distribution date. If the report is being filed for securities distributed on more than one distribution date, state all distribution dates.

March 6, 2007

6. For each security distributed:

- (a) Describe the type of security,
- (b) State the total number of securities distributed. If the security is convertible or exchangeable, describe the type of underlying security, the terms of exercise or conversion and any expiry date, and
- (c) State the exemption(s) relied on.

160,000 common shares

Exemption Relied On

Number of Securities

Section 2.13 of NI 45-106

160,000 shares

7. Complete the following table for each Canadian and foreign jurisdiction where purchasers of the securities reside. Do not include in this table, securities issued as payment for commissions or finder's fees disclosed under item 8, below.

Each jurisdiction where purchasers reside	Number of purchasers	Price per security (Canadian \$) <sup>1</sup>	Total dollar value raised from purchasers in the jurisdiction (Canadian \$)
Ontario	2	\$0.94 (deemed)	\$150,400.00
<b>Total number of Purchasers</b>	2		
<b>Total dollar value of distribution in all jurisdictions (Canadian \$)</b>			\$150,400.00

**Note <sup>1</sup>:** If securities are issued at different prices list the highest and lowest price the securities were sold for.

#### **Commissions and finder's fees**

8. Complete the following table by providing information for each person who has received or will receive compensation in connection with the distribution(s). Compensation includes commissions, discounts or other fees or payments of a similar nature. Do not include payments for services incidental to the distribution, such as clerical, printing, legal or accounting services.

If the securities being issued as compensation are or include convertible securities, such as warrants or options, please add a footnote describing the terms of the convertible securities, including the term and exercise price. Do not include the exercise price of any convertible security in the total dollar value of the compensation unless the securities have been converted.

Full name and address of the person being compensated	Compensation paid or to be paid (cash and/or securities)				
	Cash (Canadian \$)	Securities			Total dollar value of compensation (Canadian \$)
		Number and type of securities issued	Price per security	Exemption relied on and date of distribution	
N/A					

9. If a distribution is made in Ontario, please include the attached "Authorization of Indirect Collection of Personal Information for Distributions in Ontario". The "Authorization of Indirect Collection of Personal Information for Distributions in Ontario" is only required to be filed with the Ontario Securities Commission.

### Certificate

On behalf of the issuer, I certify that the statements made in this report are true.

Date: March 9, 2007.

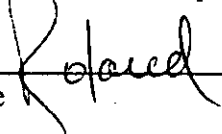
ULTRA URANIUM CORP.

Name of issuer (please print)

Raymond Roland, President – Tel.: (604) 682-7159

Print name, title and telephone number of person signing

Signature



10. State the name, title and telephone number of the person who may be contacted with respect to any questions regarding the contents of this report, if different than the person signing the certificate.

Gwen Wegner, Paralegal – Tel.: (604) 669-3116

**IT IS AN OFFENCE TO MAKE A MISREPRESENTATION IN THIS REPORT.**



### **Notice - Collection and use of personal information**

The personal information required under this form is collected on behalf of and used by the securities regulatory authorities or, where applicable, the regulators under the authority granted in securities legislation for the purposes of the administration and enforcement of the securities legislation.

If you have any questions about the collection and use of this information, contact the securities regulatory authority or, where applicable, the regulator in the jurisdiction(s) where the form is filed, at the address(es) listed at the end of this report.

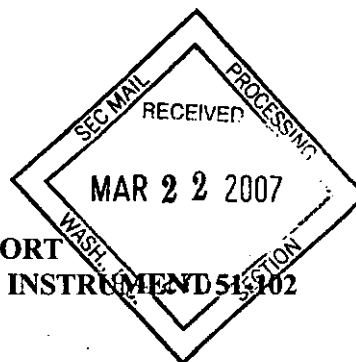
### **Authorization of Indirect Collection of Personal Information for Distributions in Ontario**

The attached Schedule I contains personal information of purchasers and details of the distribution(s). The issuer hereby confirms that each purchaser listed in Schedule I of this report

- a. has been notified by the issuer
  - (1) of the delivery to the Ontario Securities Commission of the information pertaining to the person as set out in Schedule I,
  - (2) that this information is being collected indirectly by the Ontario Securities Commission under the authority granted to it in securities legislation,
  - (3) that this information is being collected for the purposes of the administration and enforcement of the securities legislation of Ontario, and
  - (4) of the title, business address and business telephone number of the public official in Ontario, as set out in this report\*, who can answer questions about the Ontario Securities Commission's indirect collection of the information, and
- b. has authorized the indirect collection of the information by the Ontario Securities Commission.

\* Ontario Securities Commission  
Suite 1903, Box 5520 Queen Street West  
Toronto, Ontario M5H 3S8  
Telephone: (416) 593-8314 or Toll Free at: 1-877-785-1555  
Facsimile: (416) 593-8252  
Public official contact regarding the indirect collection of information:  
Administrative Assistant to the Director of Corporate Finance  
Telephone (416) 593-8086

FORM 51-102F3



**MATERIAL CHANGE REPORT  
UNDER SUBSECTION 7.1 (1) OF NATIONAL INSTRUMENT 51-102**

**Item 1.     Reporting Issuer**

Ultra Uranium Corp. (the "Issuer")  
905 West Pender Street, Suite 501  
Vancouver, BC V6C 1L6

**Item 2.     Date of Material Change**

February 13, 2007

**Item 3.     News Release**

News Release dated February 13, 2007 and disseminated to Stockwatch Magazine, BC Securities Commission, Alberta Securities Commission and Market News Publishing.

Place of Issuance: Vancouver, British Columbia.

**Item 4.     Summary of Material Change**

The Issuer is pleased to announce its receipt of a National Instrument 43-101 compliant Technical Report on the Issuer's Kalnica-Selec Uranium Project located in Western Slovakia.

**Item 5.     Full Description of Material Change**

The Issuer announces its receipt of a National Instrument 43-101 compliant Technical Report on the Issuer's Kalnica-Selec Uranium Project located in Western Slovakia authored by independent geologist Dr. Bohumil (Boris) Molak, PhD., P.Geo (BC), a qualified person under National Instrument 43-101.

The Kalnica-Selec uranium deposits were extensively explored and developed by the former Czechoslovak government's Uranovy Prieskum State Enterprise (UP). The February 43-101 Technical Report summarizes UP's exploration results obtained by the Issuer from the UP archives. Exploration and development by UP on this 28.91-square-kilometre property in the 1970s and early 1980s included radiometric surveys, geological mapping, extensive pitting and trenching vertical and horizontal drilling and tunneling.

A total of 339 vertical drill holes were drilled from surface to test the uranium mineralization. Of these, 171 holes were drilled to a maximum depth of 100 metres and 168 diamond drill holes were drilled to a maximum depth of 680 metres. Three adits with numerous crosscuts in all totalling more than 2,900 metres were driven into the Kalnica and Selec mineralized zones. Small diameter horizontal drilling was conducted from the underground workings.

UP conducted test mining of the mineralized lenses from the adits and the mined material was shipped to a processing plant in Mydlovary, in the Czech Republic. In 1984, UP abandoned the Kalnica-Selec deposits due to low uranium prices. The Kalnica-Selec Uranium Property was acquired by the Issuer in 2005 through successfully filing a Uranium Exploration application with the Geological Section of the Ministry of Environment of the Slovak Republic.

In 2005 and 2006 the Issuer conducted radiometric surveys, geological mapping, structural studies and minor litho-geochemical sampling in the southern and northern portions of the license area, in compliance with Slovak Government exploration requirements. Anomalous radioactivity was detected in areas surrounding the exploration adits, and in the south and south-eastern extremities of the license area. In the Selec zone, an almost one kilometre wide anomalous strip running north - south was detected. The highest values, exceeding up to 23 times the average background values, were obtained from the outcrops adjacent to adit 62. These anomalies indicate outcropping and/or near surface uranium mineralization and some of them represent additional exploration targets to the numerous existing targets.

Geologically, the 2005 and 2006 structural studies confirmed the presence of distinct, superimposed deformation related to the Late Mesozoic, and/or Early Tertiary collisional events. Deformation processes resulted in folding, thrust faulting, shearing and mylonitization, which have a strong impact on the redistribution of the uranium mineralization.

### **Historical Exploration**

Numerous uranium mineralized bodies were discovered and reported in 1960s to 1980s by UP in two strata-bound units at Kalnica-Selec. Based on historic information the mineralized bodies are as much as 300 metres along strike, up to 6.6 metres wide and up to several hundred metres along dip. A total of 23 uranium mineralized bodies were identified in three separate zones within the two strata bound units; fifteen uranium mineralized bodies at Kalnica, seven uranium mineralized bodies at Selec and one large uranium mineralized body at Krajna Dolina.

### **Historic Resource Estimates**

The historic resource estimates were calculated by UP using 0.015%, 0.03% and 0.05% uranium cut-off grades for the Kalnica and Selec zones and a 0.015 % uranium cut-off grade for the Krajna Dolina zone. Estimates for the Kalnica and Selec zones were based on blocks delineated by deep and shallow drill holes that were drilled from surface, by the exploration adits and cross-cuts and by short, narrow diameter, horizontal underground drill holes to a maximum of 100 metres drilled from within the adits. The resource estimate for the Krajna Dolina zone was based on four positive drill holes in a grid 400 by 400 meters. A summary of the resource estimate based on a 0.015% uranium cut off and converted to pounds (lbs) is shown in the table below.

Zone	Cut-off Grade (%U)	Thickness (m)	Volume (m <sup>3</sup> )	Tonnage (t)	Grade (%U)	U (t)	U (lbs)	U <sub>3</sub> O <sub>8</sub> (lbs)
Kalnica	0.015	4.6	204,801	548,866	0.043	236.0	520,144	613,377
Selec	0.015	3.5	289,619	776,179	0.035	271.2	597,725	704,864
Krajna Dolina	0.015	3.1	982,000	2,632,000	0.061	1,605	3,537,420	4,171,486
Total	0.015	*3.4	1,476,420	3,957,045	*0.053	2112.2	4,655,289	5,489,727

\* weighted average

The resource estimate cited predates and therefore does not conform to the more stringent reporting requirements of National Instrument 43-101 and should not be relied upon according to those standards. The Issuer is not treating the historical estimate as a current mineral reserve or resource. While the drill and assay data used in the original estimate have not been subsequently verified, the Issuer believes that the historic resource estimate provides a favourable indication of the potential of the deposit and is relevant to this news release.

These historic uranium estimates at Kalnica and Selec were limited to areas within and adjacent to the adits and significant areas with uranium mineralization were not included in the calculations because UP decided to abandon the area in 1984 before such estimates could be made.

Thus, in the Kalnica zone, only five mineralized bodies occurring within the first 200 metres of the adits 60 and 61 were included in the historic resource calculation while another ten mineralized bodies situated to the north-east of the calculated block were not included in the estimate, although they were all well defined by many intersections in the adits, cross cuts and by surface and

underground drillings.

Furthermore, at Kalnica, Selec and Krajna Dolina zones, many drill holes with significant mineralization situated outside the calculated blocks were not used in the historic resource calculations even though exploration works and geological interpretations indicated structural and grade continuity between these holes and the mineralization inside the calculated blocks.

At a cut-off grade of 0.015% the total historical resource for the three zones is 4,655,289 lbs U or 5,489,727 lbs of  $U_3O_8$ , respectively. The categories of historical resources are comparable to the inferred resources in the CIM classification and must be confirmed by further drilling and a follow-up, 43-101 compliant, resource estimate.

Recognizing that the historical resource estimate of 5,489,727 lbs of  $U_3O_8$  was calculated from only a portion of the existing historical positive exploration results, the Kalnica - Selec project represents an excellent exploration target with a potential not only to confirm the historical uranium resources, but also to find additional uranium resources in the extensions of the historic estimate blocks.

The Issuer's geologists are planning an initial drill program of approximately 4,000 meters consisting of confirmation, fill-in and limited step-out drilling within and outside of the historic grid. The drill program's objective is to confirm historic results and provide new data for a 43-101 compliant uranium resource estimate that, if successful, would add to the historical resource calculations from both existing exploration results that were not included in the prior calculations and extension of mineralized areas.

The Issuer has completed its \$3,600,000 financing through issuing 3,000,000 units at \$1.20 and is well financed for exploration. The Issuer plans to conduct its drill program as soon as possible. The drill program will have the benefit of local drilling contractors, logistical support and excellent infrastructure.

The Issuer has also filed an application for an additional license area immediately south and west of the Kalnica-Selec property. Several historic drill holes in the area south of the license intersected significant uranium mineralization indicating that the mineralization continues in a southerly direction.

All factors cited above lead the Issuer to believe there is considerable potential to significantly expand the historic resource estimates and the Issuer is looking forward to continuing exploration on the property.

The Kalnica-Selec uranium property is 100% owned by the Issuer, subject to a 2% Royalty.

### **About the Issuer**

The Issuer is a Canadian exploration and development the Issuer primarily engaged in the acquisition, exploration and development of uranium properties. the Issuer's principal asset is its 100% ownership of Kalnica Selec uranium deposits located in Western Slovakia, the site of extensive historical exploration and development. The Issuer also has interests in Gold/Silver exploration assets in Ontario, and recently announced the acquisition of 100% of the Buck Lake platinum, palladium, nickel property located approximately 25 kms from the Lac des Isles platinum/palladium mine near Thunder Bay, Ontario.

The Issuer's Common Shares are listed and called for trading on the TSX Venture Exchange with the trading symbol "ULU". As of February 12, 2007 the Issuer has 21,032,463 shares issued and outstanding. Information on the Issuer can be accessed at [www.ultrauranium.com](http://www.ultrauranium.com).

The 43-101 report will be filed on SEDAR and will be available for viewing on [www.sedar.com](http://www.sedar.com). and [www.ultrauranium.com](http://www.ultrauranium.com), the Issuer's website. Dr. Molak is responsible for the technical disclosure within this news release, the contents of which he has read and approved.

**Item 6. Reliance on Subsection 7.1(2) or (3) of National Instrument 51-102**

The Issuer is not relying on subsection 7.1(2) or (3) of National Instrument 51-102.

**Item 7. Omitted Information**

There is no omitted information.

**Item 8. Senior Officers**

Raymond Roland, President - (604) 682-7159.

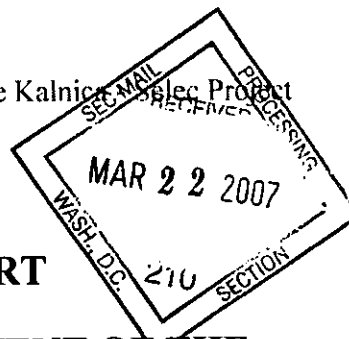
**Item 9. Statement of Senior Officer**

The foregoing accurately discloses the material change referred to herein.

**DATED** at the City of Vancouver, in the Province of British Columbia, this 22<sup>nd</sup> day of February, 2007

"Raymond Roland"

Raymond Roland, President



**TECHNICAL REPORT  
FOR PRELIMINARY ASSESSMENT OF THE  
KALNICA-SELEC PROJECT,  
SLOVAKIA**

**JTSK System X: 1,216,717.16; Y: 503,138.03**

Prepared for

**Ultra Uranium Corp.**  
501-905 West Pender Street  
Vancouver, B.C., V6C 2T7  
Canada

by

**Bohumil B. Molak, Ph.D., P.Geo.**  
Tel.: 604-325-3660  
Vancouver

February 13, 2007  
(Amended February 16, 2007)

## Technical Report for Preliminary Assessment of the Kalnica - Selec Project

### Table of Contents

	page
1. Summary	4
2. Introduction and Terms of Reference	7
3. Disclaimer	8
4. Property Description and Location	8
5. Accessibility, Climate, Local Resources, Infrastructure and Physiography	13
6. History	14
7. Geological Setting	19
8. Deposit Types	20
9. Mineralization	21
10. Exploration	24
11. Drilling	28
12. Sampling Method and Approach	28
13. Sample Preparation, Analyses and Security	28
14. Data Verification	29
15. Adjacent Properties	30
16. Mineral Processing and Metallurgical Testing	30
17. Mineral Resource and Mineral Reserve Estimates	32
18. Interpretation and Conclusions	34
19. Recommendations	38
20. References	39
21. Certificate of Qualifications	42

### Tables

Table 1: Kalnica – Selec License, Cadastral Data	9
Table 2: Kalnica – Selec License Coordinates	9
Table 3: Kalnica – Selec License Data	9
Table 4: Summary of Diamond Drill Hole Intersections	16
Table 5: Highlights of the Best Diamond Drill Hole Intersections	16
Table 6: Projected vs. Real Production	18
Table 7: The Ore-bodies, Lithology and Attitudes	22
Table 8: Parameters of the Ore-bodies in the Adit No. 60	22
Table 9: Statistical Data for U, Th and K	25
Table 10: Structural and Lithological Data	27
Table 11: Sample Description and Uranium Assays	29
Table 12: Historical Resource Estimates	33

### Appendices

Appendix I: Summary of Diamond Drilling Data	44
Appendix II: Highlights of Uranium Mineralization in Diamond Drill Holes	48



## Technical Report for Preliminary Assessment of the Kalnica - Selec Project

Appendix III: Mineralization in Shallow Drill Holes (to 100 m) and Trenches	55
Appendix IV: Assay Certificates	61
Appendix V: A Comparison of Reserve and Resource Classifications	65

### Figures

- Fig. 1: Location Map, Kalnica - Selec License Area
- Fig. 2: Kalnica - Selec License Area with Situation of Diamond Drill Holes
- Fig. 3: Topographic Map of Kalnica – Selec License with Diamond Drill Holes
- Fig. 4: Geological Map of Kalnica – Selec Area
- Fig. 4a: Legend of Geological Map of Kalnica-Selec Area 1:10,000
- Fig. 5: Cross Section 2 – 2'
- Fig. 6: Cross Section 3 – 3'
- Fig. 7: Gamma-spectrometric Map
- Fig. 8: Map Showing Diamond Drill Holes, Zones and Adits
- Fig. 9: Map of Diamond Drill Holes with Significant Uranium Mineralization, 2005/2006 Litho-geochemical Sample Sites and Historic Resource Blocks
- Fig. 10: Map of Shallow Drill Holes (to 100 m) and Trenches
- Fig. 11: Geological Map of Adit No. 60 and Cross Section A – A'
- Fig. 12: Geological Map of Adit No. 61 and Cross Section A - B
- Fig. 13: Geological Map of Adit No. 62 and Cross Section B – B'
- Fig. 14: Selec Zone: Section 8-8' through the Mineralized Bodies Nos. 1, 2, 3, 5 & 6
- Fig. 14a: Selec Zone: Section through Drill Holes 915, 852, GP121, GP119 & 820
- Fig. 14b: Longitudinal Section A - B Showing the Mineralized Bodies 2 to 7
- Fig. 15: Projection of the Mineralized Bodies to Horizontal Plane, Selec Area
- Fig. 16: Geological Map Showing the Adit No. 60 level (350 m asl), the Mineralized Bodies, the Diamond Drill Holes and Section Lines A – A' and B – B'
- Fig. 17: 3D View of the Adits 60 and 61, Diamond Drill Holes and Section Lines A – A' and B – B'
- Fig. 18: 3D View of the Adits 60 and 61, Diamond Drill Holes and Section Lines A – A' and B – B'
- Fig. 19: Section A – A' Showing Diamond Drill Holes with Uranium Contents in the Mineralized Body Intersections
- Fig. 20: Section B – B' Showing Diamond Drill Holes with Uranium Contents in the Mineralized Body Intersections
- Fig. 21: Digitized Log of Diamond Drill Hole # 909
- Fig. 22: Complete Bouguer Anomaly Map, Kalnica – Selec Area
- Fig. 23: Total Magnetic Intensity, Kalnica - Selec Area
- Fig. 24: Map Showing Uranium Deposits and Occurrences Hosted by Permian Formations in the Slovak Republic
- Fig. 25: A) Gamma Survey Crew in Selec Village; B) GS 256 Spectrometer
- Fig. 26: Deciduous Forest; GS 256 Spectrometer in the Foreground
- Fig. 27: Radiometric Survey at the Outcrop near the Adit 62
- Fig. 28: Radiometric Survey in the Selec Area

## 1. SUMMARY

Ultra Uranium Corp. (the "Company") has a 100% interest in the Kalnica - Selec license area situated in western Slovakia, approximately 10 kilometers east from Nove Mesto nad Vahom and 90 air kilometers northeast of Bratislava, the capital of Slovakia. The license currently covers an area of 28.89 square kilometers (2,889 hectares) and has a good access.

In the early 1960s, Uranovy Prieskum ("UP"), a state run enterprise that conducted all uranium exploration and development in the former Czechoslovakia, discovered radioactive anomalies in the Povazsky Inovec Mts. using airborne surveys. Initial regional exploration stage in the 1960s was followed by more focused exploration in the Kalnica - Selec area in the 1970s and the early 1980s by radiometric surveys, geological mapping, sampling, pitting, trenching, drilling and tunneling. During that period 65 shallow pits and trenches, 172 holes to a maximum depth of 100 meters, 167 diamond drill holes to a maximum depth of 650 meters and 3 adits totaling more than 2,500 meters were completed. In the late 1970s and early 1980s test mining took place from the adits and reported production totaled 10,452 tonnes of uranium ore grading 0.053 % U. The material was shipped approximately 200 kilometers to a processing plant in the Czech Republic.

Past exploration discovered numerous zones of uranium mineralization in two strata-bound units, referred to in this report as "mineralized beds I and II". These units are reportedly as much as 300 meters along strike, up to 6.6 meters wide and up to several hundred meters along dip. A total of 23 mineralized bodies were identified in three separate zones, fifteen at Kalnica, seven at Selec, and one at Krajna Dolina.

In 1984, historic resource estimates were made for the Kalnica, Selec and Krajna Dolina zones by geologists experienced in uranium exploration and mining of the former Czechoslovakia. The following table summarizes the historical resource estimates made for the three separate zones on the property:

Zone	Cut-off Grade (%U)	Thickness (m)	Volume (m <sup>3</sup> )	Tonnage (t)	Grade (%U)	U (t)	U (lbs)	U <sub>3</sub> O <sub>8</sub> (lbs)
Kalnica	0.05	2.3	45,738	122,578	0.126	154.4	340,298	401,294
	0.03	3	108,160	289,871	0.069	200.5	441,902	521,111
	0.015	4.6	204,801	548,866	0.043	236.0	520,144	613,377
Selec	0.05	1.93	42,253	113,236	0.112	127.0	279,908	330,080
	0.03	2.52	133,036	356,536	0.062	220.8	486,643	573,872
	0.015	3.5	289,619	776,179	0.035	271.2	597,725	704,864
Krajna Dolina	0.015	3.01	982,000	2,632,000	0.061	1,605	3,537,420	4,171,486

Resource estimates for mineralization from the Kalnica and Selec zones were calculated in three alternatives using cut-off grades of 0.015 %, 0.03 % and 0.05 % U. Estimates

## Technical Report for Preliminary Assessment of the Kalnica - Selec Project

were based on blocks delineated by deep and shallow drill holes, exploration adits, cross-cuts and short underground holes and were limited to areas within and adjacent to the adits. In the Kalnica zone, the mineralized bodies 1 – 5 only were included in the calculation. The resource block in the Krajna Dolina zone was calculated using a cut-off grade of 0.015 % U only and is based solely on four diamond drill holes spaced about 400 meters that intersected uranium mineralization from 330 to 500 meters below the surface.

These historical resources reported for the Kalnica, Selec, and Krajna Dolina areas are all correlative to the CIM inferred category. Readers are cautioned that the Company does not treat the above historic resources as National Instrument 43-101 compliant resources verified by the qualified person, therefore the historic resources should not be relied upon.

In all three zones, many drill holes with significant uranium mineralization, situated outside the calculated blocks were not used in the calculation, although the geologic interpretations indicate structural and grade continuity between the holes inside and outside the calculated blocks. In the Kalnica zone, the area extending about one kilometer north-east of the calculated resource block, and containing several well defined mineralized bodies, was not included in calculation.

Mineralization is hosted by Permian volcani-sedimentary formations, and the mineralized body shapes are commonly lenticular and distributed in an *en echelon* pattern. The strata-bound style uranium mineralization is represented by disseminated pitchblende, brannerite and thorbernite and is locally cut by the epigenetic style, remobilized, hydrothermal sulphidic veins composed of arsenopyrite, pyrite, bornite, digenite, galena, chalcopyrite, molybdenite, covellite, sphalerite and tetrahedrite. Quartz, dolomite and rutile are the most common gangue minerals. Iron oxides commonly occur in the oxidation zone.

Test mining in the Kalnica - Selec area continued until 1984, when UP decided to stop the operations and abandon the area due to low price of uranium. Since that date no exploration and/or mining activities have been conducted in the Kalnica – Selec area.

During the communist era, most information relating to uranium in the former Czechoslovakia was kept top secret. In the early 1990s, the secrecy was removed and Uranpres s.r.o. company in Spisska Nova Ves became the custodian of all historic information, including information on the Kalnica – Selec deposit. After acquiring the Kalnica – Selec license, the Company commissioned Koral s.r.o. to conduct the work program according to the project that was filed with the MESR. The project includes compilation of historic data, ground radiometric surveys and re-interpretations with the aim to re-assess the project's merit for further exploration.

In 2005 and 2006 the relevant historic data including drill logs, down-hole logs, maps and sections were digitized or scanned and representative illustrations are presented at the back of this report. The fieldwork by contracted representatives of Koral s.r.o., the

Comenius University and by the writer included ground radiometric surveys, geological mapping and sampling in the southern and northern portions of the license area. The mapping confirmed Permian volcani-sedimentary rocks as being the carriers of anomalous radioactivity. Field observations in the Kalnica area also indicated a structural control of the mineralization, where the mineralized bodies tend to accumulate in the fault-bound blocks along a sigmoid, over-thrust structure.

Based on the survey results, a digital map of uranium, thorium and potassium anomalies was constructed. The map shows three uranium anomalies in the Kalnica area, and one large, almost contiguous anomaly in the Selec area. All but one anomaly are hosted by the Permian volcani-sedimentary rocks and the outstanding anomaly appears to be hosted by the Carboniferous sedimentary rocks.

The anomalies are flanked by strips of non-radioactive quartzite, siliceous sandstone and carbonate rocks of Triassic age. Both radioactive and non-radioactive rock formations strike north to north-northeast, conformably with the regional structure. Situated at depth 330 to 500 meters, the mineralization at the Krajna Dolina area has no radiometric response at the surface.

During the surveys the writer collected six anomalous rock samples from the old dumps and from the outcrops adjacent to adits Nos. 60 and 62 in the Kalnica and Selec zones. Chemical analyses of these samples returned 5 to 110 ppm uranium, values which somewhat correlate with the spectrometer readings, while the differences can be accounted for by the influence of the local rock environment.

The uranium mineralization at Kalnica-Selec resembles other Permian, volcani-sedimentary hosted, strata-bound U (Cu-Mo) deposits and occurrences of the West Carpathians, including Novoveska Huta, Jahodna and Kozie Chrbty. Originally these deposits probably represented very low-grade, disseminated uranium mineralization, which was re-mobilized during the post-depositional stages to form richer, strata-bound bodies. Metallogenetically, these deposits appear to be analogous to the Saddle Hill uranium deposit of Mongolia that was classified as a volcani-sedimentary, strata-bound, uranium deposit with minor, structurally controlled mineralization.

The Kalnica-Selec project appears to have an excellent potential to contain substantial remaining uranium resources within the calculated blocks and beyond these blocks, including the mineralized bodies in the adits and in the extensions of the calculated resource blocks, as indicated by positive drill intersections in all three zones. Therefore, the writer recommends further exploration of the License area including 4,000 meters of core drilling to confirm and expand on the mineralization identified in previous exploration. Chemical analyses of the anomalous intervals would be conducted to compare with the down-hole logs.

Ground radiometric surveys, geological mapping and litho-geochemical sampling are recommended to continue over the central portion of the license area. Furthermore, application for an additional exploration license covering areas immediately south-west

and south of the existing license is recommended based on the presence of uranium mineralization in drill holes to the south of the existing license and the presence of a radioactive anomaly in the southwest portion of the License found during the Company's 2006 ground geophysical program. The proposed budget for this work program is estimated at \$1,040,000.

## **2. INTRODUCTION AND TERMS OF REFERENCE**

This technical report has been prepared at the request of the President and CEO of Ultra Uranium Corp. of Vancouver. The writer was retained on August 24, 2006 to review the existing geological data on the Kalnica-Selec License, to oversee and assist with the digitization process by Koral s.r.o. in Slovakia, to take part in the field surveys and to prepare a background for the re-assessment of the project under current economic and technological conditions. The report presents representative historic maps and sections copied from the originals, or in digitized forms, the digitized and vectorized drill logs and down-hole logs, the results of new radiometric survey, re-interpretations and recommendations, all aiming at the re-assessment of the project's merit to undertake further work.

The writer visited the Kalnica-Selec license area in 2005 (October 19 to 23) and in 2006 (September 21 to October 2) to take part in the ground radiometric surveys and to conduct geological mapping and litho-geochemical sampling. Before and/or after the field work the writer also spent time in the offices of Koral s.r.o., in the archive of Uranpres s.r.o. in Spišská Nová Ves and at the Statny geologicky ustav Dionýza Stúra in Bratislava, to review the historic reports and data, to arrange for scanning and digitization of relevant historic documents and to assist with the various map work.

The sources of information and data contained in this technical report are the historic reports by UP, the MESR documents and the results of the recent surveys, mapping and sampling conducted by Koral s.r.o. and by the writer. Most historic information was excerpted and translated from the reports by Stimmel et al., (1984), Mihal and Felber (1983), the Decision to grant exploration License of June 28, 2005 and the annual reports for the MESR by Komon (2005, 2006). All other sources of information are listed in the References chapter.

In addition, the writer discussed many topics relating to the project with Messrs. Jozef Komon and Slavomir Daniel of Koral s.r.o., Jozef Daniel of Uranpres s.r.o., and A. Mojzes of the Comenius University. S. Kenwood, P. Geo advised on the historical resources interpretation and recommendations for further exploration program. To the knowledge of the writer, additional, primary, historic information on the Kalnica - Selec area exists in the Uranpres archive, which could not be reviewed in detail and translated due to limited time, but should be reviewed and used in the future. Due to preliminary character of this report and limited space, only representative maps, sections and other illustrations, either copied from originals, or in digitized forms, are presented.

## Technical Report for Preliminary Assessment of the Kalnica - Selec Project

Terms of reference for this assignment include preparation of a qualifying geological report in compliance with the Standards of Disclosure for Mineral Projects as set out in the Canadian Securities Administrators' (CSA) National Instrument 43-101 and its Companion Policy 43-101CP, and in accordance with the technical reporting guidelines and requirements stipulated in CSA Form 43-101F1.

Subject to agreement with Ultra Uranium Corp. the writer consents to the filing of this technical report with any stock exchange and/or other regulatory authority and any publication by them, including electronic publication in the public company files on their web sites accessible by the public in the form of technical report for reading only.

### 3. DISCLAIMER

For most parts of this technical report the writer has relied on third party information, on historic reports by UP, particularly on the report by Stimmel (1984), and on the summaries of historic information included in the annual progress reports for the MESR (Komon 2005, 2006). In addition, the writer discussed many topics relating to the project with Messrs. Jozef Komon and Slavomir Daniel of Koral s.r.o., and with Jozef Daniel of Uranpres (past UP Chief Geologist). Although the above mentioned experts are not qualified persons for the purpose of this report, the geological, legal, environmental, political or other information reported by them is relevant to this technical report.

Third party information is generally presented without comments, and is to the best of the writer's knowledge and experience correct and suitable for inclusion in this report. Whenever applicable, the writer commented on the extent of reliance of the portions of the technical report to which the disclaimer applies. The writer took steps to verify the previous assay results by re-sampling the dumps and outcrops near the old adits. The sources of all information not based on personal examination are quoted in the References item.

### 4. PROPERTY DESCRIPTION AND LOCATION

The current exploration license entitled "Kalnica – Selec – U Ores" was granted by the Section of Geology and Natural Resources, of the Ministry of the Environment of the Slovak Republic on June 28, 2005 (Number: 276/536/2005 – 7). The Kalnica-Selec license area covers 28.89 square kilometers (2,889 hectares) and is located approximately 90 air kilometers northeast of Bratislava, capital of the Slovak Republic (Fig. 1). The tables below list the relevant license information.

Regional Name and Code of the region is Trencin 3 and the district names and codes are Trencin 309 and Nove Mesto nad Vahom 304. The established exploration area is situated in the following cadastral areas and communities:

## Technical Report for Preliminary Assessment of the Kalnica - Selec Project

**Table 1: Kalnica – Selec License Cadastral Data**

Serial #	Cadastral area ident. #	Name of cadastral area	Community Name	Proportion in %	Costs in Sk*
1	823155	Kalnica	Kalnica	34.43	14,977
2	802255	Beckov	Beckov	8.66	3,767
3	825093	Kočovce	Kočovce	0.03	13
4	884935	Nová Ves nad Váhom	Nová Ves nad Váhom	0.03	13
5	854841	Selec	Selec	33.39	14,524
6	868591	Velke Stankovce	Trenčianske Stankovce	21.90	9,526
7	835684	Male Stankovce			
8	852929	Rozvadce			
9	829161	Krivosúd-Bodovka	Krivosúd-Bodovka	1.56	680

\* Slovak koruna

The license area represents a single contiguous area (see Fig. 2). It has been legally surveyed and the coordinates of the corner points (in the JTSK coordinate system) are as follows:

**Table 2: Kalnica – Selec License Coordinates**

Point	Y	X
1	506,557.55	1,221,046.59
2	503,900.08	1,221,298.00
3	499,718.51	1,212,397.56
4	503,336.40	1,212,136.36

A map of the license area at scale 1:50,000 is appended to the Decision and forms its integral part. The current holder of the Kalnica-Selec –U ores license is J. Komon, - Ozon, Spisska Nova Ves. The Company has a valid contract with the holder, who holds the license in trust for the Company until it forms a subsidiary company to which the License will be transferred.

**Table 3: Kalnica – Selec License Data**

Prospect Name	Holder	Area	Good until
Kalnica-Selec	J. Komon, Ozon s.r.o.	2,889 hectares	July 19, 2009

The MESR obligations for the Company to conduct geological works are as follows:

The holder of the exploration license:

1. will conduct the geological works in accordance with the geological project, which must be prepared in compliance with the Geological Law and other legal regulations;
2. will prepare a final report compliant with § 14 of the Geological Law and will submit to the Ministry an independent part of the final report with the resource calculation for examination and approbation according to § 16, section 2 of the Geological Law;

Technical Report for Preliminary Assessment of the Kalnica - Selec Project

3. will submit the approved final report to the Slovak Geological Survey (Statny geologicky ustav Dionyza Stura) in prescribed form for archiving in accordance with § 17 of the Geological Law;
4. according to § 22, section 1 of the Geological Law will submit to the Ministry an annual report on the exploration activity with the results of selected geological works and expenses for the works not later than six weeks after the lapse of calendar year;
5. during the exploration works will proceed in compliance with the requirements of environmental protection, according to the Law No. 543/2002 of the Law Code on the nature and country protection;
6. during the exploration work will proceed in compliance with the requirements of environmental protection, according to the Law No. 543/2002 of the Law Code on nature and country protection, in the wordings of the later regulations;
7. during the exploration, work will not encroach upon the vegetation of the Selecky Potok Natural Memorabilia;
8. during the exploration, work will proceed in compliance with the establishments of the Law No. 364/2004 of the Law Code on Waters and on the Amendment of the Law No. 372/1990 of the Code on Trespassing in the wordings of later regulations (Water Law),
9. during the exploration, work will avoid any action hazardous to the groundwater quality, which could cause damage to the nearby water source;
10. during the exploration, work that will reach into hygienic protection areas of the "Stoky" and "Klokocovka" Water Sources will respect and maintain the conditions and activity regime as referred to in the Decision of the ObUZP in Trencin, mark ZP 1993/1996-VII Ba of 23<sup>rd</sup> July, 1996 and of the ONV Trencin under ref. No. OPLVH 1935/1988 of 14<sup>th</sup> June 1988;
11. before technical work starts will apply to the Environmental District Office in Nove Mesto nad Vahom for their statement according to the Law No. 364/2004 of the Law Code on Waters and on the Amendment of the Law No. 372/1990 of the Code on offences in the wordings of later regulations (Water Law);
12. during the exploration work will proceed in compliance with the establishments of the Law No. 220/2004 of the Law Code on the Protection and Use of Agricultural Soil and on the Amendment of the Law No. 245/2003 of the Law Code on Integrated Prevention and Environmental Pollution Control and on the Amendments to some other Laws;
13. during the exploration work will abide by the Law No. 61/1977 of the Law Code on Forests in the wordings of later regulations;
14. during the exploration work will proceed in compliance with the Law No. 100/1977 of the Law Code on Forestry Management and State Administration of the Forestry Management in wordings of the later regulations;
15. during the exploration work will proceed in compliance with the Declaration of the MP SR No. 329/1996 of the Law Code that changes and amends the Regulation ML and VH SSR No. 103/1977 of the Code on proceedings in regard to Forest Soil Stock protection;
16. will notify the Ministry of Health of Slovak Republic of any natural mineral water source, gases and emanations found during the geological works no later than 15 days after such finding has been made in compliance with the § 69 section 1, letter c)



- of the Law of NR SR No. 277/1994 of the Code on Health Care in the wordings of later regulations;
17. in case of archeological find will proceed according to § 40 of the Law No. 49/2002 of the Law Code on the Protection of Memorabilia and § 127 of the Law No. 50/1976 of the Law Code on the area planning and construction order in the wordings of later regulations;
  18. will conduct the geological work away from the road body and road area;
  19. will apply to the Slovak Railways if technical work is planned within the Railways protection area;
  20. will apply to the Slovak Gas Industry a.s., Division of Domestic Transport for their statement before conducting technical work, will apply to the Slovak Telecom a.s., for their statement before conducting technical works;
  21. will apply to the Trenčin Water Management a.s. for their statement before conducting technical work;
  22. will apply to the Slovak Water Management n. e. OZ Piestany for their statement before conducting technical work;
  23. during technical works will maintain valid STN (technical norms) and the Law No. 656/2004 of the Law Code on the Energy Management and on changes to some Laws,
  24. will apply to the Western Slovakian Energetika a.s., Regional Network Management for their statement before conducting technical work;
  25. during technical work will proceed in such a manner as to avoid disturbing the stability of the existing support points and integrity of the VN, NN ground systems.

The exploration license has been granted for four years and can be reviewed on the website of the Ministry of the Environment of the Slovak Republic ([www.enviro.gov.sk](http://www.enviro.gov.sk), list of mineral licenses as of July 1, 2006).

According to § 23 of the Geological Law the holder of the exploration license is obliged to pay SKK 3,000.00 annually for each commenced year and for each commenced square kilometer, i.e. the amount SKK 87,000.00 (in words eighty seven thousand Slovak koruna) (29 square kilometers x SKK 3,000) no later than three months from the date of granting of the exploration license. The payment must be forwarded to the reception account of the Ministry in the State Treasury account No. 7000076111/8180, variable symbol 49791528. In compliance with § 23 section 3 and 4 of the Geological Law, the Ministry will forward within 30 days after the reception of this payment a part of the fee to the communities as referred to under point 1.

The geological exploration program will be conducted in accordance with the geological project and the exploration license holder will use the acquired minerals only for laboratory and technological testing purposes. The license holder is obliged to record the amounts of minerals collected during the prospecting and exploration programs that are conducted within the scope of geological work on the established exploration area.

Decision to establish the Kalnica – Selec exploration area has been made on the basis of an Application submitted on March 15, 2005 by RNDr. Jozef Komon – OZON,

## Technical Report for Preliminary Assessment of the Kalnica - Selec Project

Jilemnickeho Street 21/11, 052 01 Spisska Nova Ves. The conditions for the geological work to be conducted within the established exploration area were negotiated at a session held on June 22, 2005 in Bratislava. The conditions were set down on the basis of statements of the organizations whose interests are protected by special regulations (and which are part of the documentation materials).

The Decision may be appealed according to § 61 of the Legal Rule within 15 days of the delivery to the Ministry. This Decision may be scrutinized by the Law Courts only after common correctional means have thoroughly been used.

There are three known mineralized zones within the license area and in this report they are termed the Kalnica, the Selec and the Krajna Dolina zones (Fig. 8). The zones were surveyed and explored by trenching, pitting and drilling and three exploration adits with several cross-cuts driven in 1970s and early 1980s into the uranium-mineralization. Test mining was conducted in the late 1970s and early 1980s in the Kalnica and Selec zones. Before abandoning the area UP blasted the adit collars to prevent unauthorized access. The location of the old adits east of Kalnica and north of Selec villages is shown on the attached maps (Figs. 9, 16, 17, 18). The historic resource estimates for the Kalnica, Selec and Krajna Dolina zones are presented in the item on Mineral Resource and Mineral Reserve Estimates.

Access to the adits could be restored by removing the blasted material from the collars, however, the accessibility of tunnels and cross-drives is questionable. There are remediated waste dumps containing very low-grade uranium ore (termed S-ore) adjacent to the collapsed collars of No. 60 and No. 61 adits and a small amount of similar material also occurs in front of the No. 62 adit. No other waste deposits or tailing dams are known to exist within the license area.

The only environmental liabilities known to the writer to exist within the license area are the Selecký Potok Natural Memorabilia and the game protection area at the southwestern margin of the license. It is the responsibility of the license holder to ensure that the exploration works will not pose any harm to the vegetation within the Memorabilia and will not enter the game protection area. The Company should also notify the landowners before entering the private fields and forests and should meet with the local community to explain the Company's plans and intentions in the area to prevent unfounded environmental concerns.

To the knowledge of the writer, the Company paid to the MESR the annual license fees for 2005 and 2006 and the license is in good standing. There are no other payments, terms of royalties, back-in rights, or other agreements and encumbrances to which the property is subject. All the known liabilities, and permits that must be obtained before conducting the agreed works are listed above. To the knowledge of the writer, all contractual obligations have been fulfilled by the license holder and all necessary permits have been acquired prior to commencement of exploration work in the license area.

## **5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY**

The license area is situated within Nové Mesto nad Váhom and Trenčín Districts. The region is served by Bratislava – Považská Bystrica highway, by the secondary road Trenčín – Prievidza, and by the railways Bratislava – Žilina and Trenčín – Bánovce nad Bebravou, all running along the edge of the mountain range, about seven kilometers west of the license area. A network of maintained paved roads connects the villages and most valleys can be accessed by paved or firm, dirt roads. Access to the hilly and forested areas within the license is via forestry dirt roads, but if the forests are privately owned, the owners should be contacted prior to entering their property. The distance from any point to the railway is less than eight kilometers and the distance to a maintained road is less than five kilometers.

The climate in the region is typical of Central Europe, although a local microclimate during the summer and winter months is moderated by the Danubian Plain from the south and/or by the altitude. The mineralized zones are situated at altitudes ranging from about 240 to 470 meters above sea level and the topography comprises valleys, smooth slopes with meadows and cultivated fields and moderate slopes and hills covered mostly by deciduous forests (Figs. 3, 26). At the higher altitudes, the snow pack may persist from December until March and this period of the year is least favourable for diamond drilling.

Most of the area belongs in the medium moist category with annual mean precipitation 700 – 800 millimeters and average annual temperature 6 – 9 °C. The drainage is relatively dense, forming short transversal streams draining the western and northern parts of the region into the Váh River and the eastern part into the Nitra River. Small springs of dislocation, fracture and/or talus type occur quite frequently, but yields from them are small, from 1 to 10 liter/second. Greater yields have the springs discharging from the screes in the valleys and there are a few springs at the southern edge of Selec community with discharge 30 liters/second. Kalnický and Selecký potok creeks appear to have sufficient yields for the drilling purposes.

Morphologically, the region is mildly dissected with relief ranging from 230 to 1,000 meters above sea level (Fig. 3). The lowest point is in the Hôrčianska dolina and the highest point is the Inovec Mt. (1,042 meters asl.). The overall relief is largely subject to geological structure. Most slopes are smooth, scarcely exceeding 40°. The valleys are of flat-bottomed and alluvial plain types.

Most soils are clayey-loamy, but grey, forest soils predominate in the forested areas. The vegetation comprises deciduous trees including oak, beech and hornbeam, which are logged to supply various industries. Of limited importance are industrial minerals including limestone and dolomite that are mined for road construction purposes. There are also several sand and gravel pits along the Váh River. The overburden in the forested areas is generally thin, less than 1 meter, however, it increases considerably in the valleys and cultivated areas. The rock exposure varies within the license. Elongated

ridges with steep slopes contain some outcrop and especially Triassic quartzite and carbonate rocks tend to form distinct exposures. The more moderate relief contains very limited outcrop.

The city of Trencin is the closest industrial centre and provides some services required to conduct mineral exploration. Drilling technology and staff are available in Bratislava, Spisska Nova Ves and other mining centres in Slovakia.

## 6. HISTORY

After World War II, the Czechoslovakian government signed a confidential agreement with the Soviet Union, whereby uranium exploration, production and export came under Soviet control. Since then, all information on this highly strategic metal was kept top secret. In 1948, Czechoslovakia became a socialist block country and all minerals in the country became the property of the state. The Law did not permit private ownership of the mineral licenses and Ceskoslovensky uranovy pruzkum, state enterprise (CSUP) conducted all uranium exploration in the country. The mineral policy of the communist government was to secure self-sufficiency in raw materials, thus the government largely subsidized mining and financed extensive exploration campaigns for a wide range of commodities. During four decades a lot of detailed work was accomplished and several new deposits and prospects were discovered.

Such developments continued until 1989, when political changes brought about a new government and market economy, leading quickly to cuts on subsidies, closure of most mines and putting aside newly discovered prospects. However, in the early 1990s the new government legalized private ownership of mineral licenses and granted foreign entrepreneurs rights to establish subsidiary companies and own mineral licenses. Regarding uranium, the formerly secret information became available for review and use, thus creating good opportunities to acquire the already discovered prospects and/or abandoned mines, and to use historic data for re-assessments to determine if they would be worthwhile undertakings under current economic and technological conditions.

The Považsky Inovec Mts. area was first mapped and investigated by Zoubek (1936) and Kamenický (1955, 1956, 1958, 1961). Plašienka (1976) further studied structural and tectonic setting of the envelope series in the northern part of the mountain range. The first stage exploration for radioactive materials in the Považsky Inovec Mts. was undertaken in the 1960s by the CSUP Pribram, zavod IX Spisská Nova Ves, with Soviet participation. Aero-gamma surveys indicated an extensive anomaly east of Hôrka nad Váhom, adjacent to ground elevation of 514 meters and subsequently, the ground gamma survey was extended to cover the whole area underlain by Late Paleozoic rocks and six more anomalies were identified (Komon, 2005a).

Ground radiometric surveys focused on delineating the anomalies in detail and on detecting further possible anomalies in their extensions. Trenching and drilling to 300 meters was conducted to test the airborne anomaly at Hôrčanska dolina valley. Three drill holes totaling 787.5 meters were sunk in 1966, but failed to intersect notable

mineralization. The Prostredna dolina anomaly was drill tested by 40 - 50 meters deep holes. In total 769.3 meters were drilled, but the results were discouraging again. Afterwards the exploration works ceased and the area was abandoned for several years.

In 1972 the second stage of exploration started in Hôrčanska dolina with the anomaly mapping at 1:25,000 scale. The ground radiometric survey in small pits and geo-electric surveys and trenching were conducted at the contact between diabase and sericitic-chloritic phyllite to uncover limonitic alteration, originally probably a pyritized zone with maximum output of  $5 \text{ pA/kg}^{-1}$  (pico-amperes/kilogram).

In 1972-1973 Mihal and Felber (1973) mapped the northern part of Považský Inovec Mts. at 1:25,000 scale and determined the extent of Carboniferous and Permian formations. The authors also prepared a new litho-stratigraphic classification of the Late Paleozoic rocks and improved the knowledge of the structure and tectonics of the area by recognizing the nappe structures and thrust faults within the crystalline, Late Paleozoic and Mesozoic sequences. The Selec and Rakovec shear thrusts were of regional significance and the Inovec nappe was identified as having been transferred along the Selec thrust fault to the east. The structural interpretations indicated a transversal reduction of space in an east to west direction that took place during the Late Paleozoic epoch.

In 1974 the radiometric surveys detected anomalies in Prostredna dolina and UP followed up with trenching and mapping at 1:5,000 scale. The geo-electric survey over an area of 0.9 sq. kilometers was made and uranium - copper mineralization in the cupriferous sandstone was found. Discontinuous chip samples of this rock from trenches returned 0.027 to 0.827 % uranium, up to 5 % copper and increased values of vanadium, antimony and arsenic. Additional chip samples from this area returned 0.130 and 0.142 % uranium and these positive results encouraged further detailed radiometric surveys and exploration including, pitting, drilling and tunneling (Komon, 2005a).

In 1975 the radiometric and ground gamma surveys discovered three anomalies in the Selec zone, which were subsequently explored by adit No. 62. In 1976, seven holes to 300 meters were drilled at Hôrka and Kalnica villages. The area was further explored by pitting and drilling of deep and shallow holes and a total of 10,516 meters was completed.

From 1977 to 1979 geo-magnetic and geo-electric surveys were conducted in the area. Magnetic field in the area between Kalnica and Selec was found to be fairly monotonous (Fig. 22). A distinct magnetic high occurred around Kalnica village and it was interpreted to represent an amphibolite body about 1.5 kilometers in diameter. This body does not contain uranium mineralization. The underground works in adits Nos. 60 and 61 intersected an effusive-sedimentary, uranium-bearing formation composed of two stratigraphically distinct beds, designated as mineralized beds I and II. Car-borne surveys and a gamma survey in shallow pits detected a total of 31 radioactive anomalies. Their sources were determined to be mineralized beds I and II, the overlying "copper-bearing sandstone", the sorption zones associated with oxidation of original pyrite -

hematite – Ra-U minerals and Th-K anomalies in the crystalline schist. Rojkovič (1980a, b, 1997) further studied the origin, mineralogy and geochemistry of the ores.

During the period 1980 - 1983 adit No. 62 was opened and test mined (Fig. 13). Test mining also continued in adit No. 60, above the 350 m above sea level (Figs. 11, 16). Exploration drilling at the end of this period totaled 172 drill holes to 100 meters depth (Fig. 10) and 167 diamond drill holes to 650 meters depth (Fig. 8) (Komon, 2005a). UP conducted the exploration drilling with pre-wireline, thin-walled conventional B-size strings, which tended to deviate from the intended targets. Fortunately, most drill holes intersected uranium mineralization less than 200 meters below the surface, thus deviations were of moderate range only. Another problem UP faced was poor core recovery, which in the mineralized intervals commonly dropped below 40 %. This adversely affected quality and reliability of the chemical analyses and to alleviate the problem, UP regularly collected channel samples from the exploration adits for the assays, against which the gamma survey results could be compared.

UP systematically conducted down-hole radiometric logging and developed a method of calculating the uranium content from the gamma logs (in  $\text{pA.kg}^{-1}$ ), caliper, mud density and other related data (Fig. 21, Appendix I). The radiometric logging at that time was subject to strict mining and technical guidelines and regulations and included routine check-ups and calibrations of the instruments as set down by the mining regulatory institutions of the former Czechoslovakia.

The historic diamond drilling was successful in intersecting significant uranium mineralization in 86 out of a total of 167 drill holes (i.e. 51 %). Mineralization ranging from 0.01 to 0.476 % U was intersected in 64 holes, of which 25 holes (39 %) found it at depth less than 100 meters, 18 holes (28 %) at depth 101 to 200 meters, 10 holes (16 %) at depth 201 to 300 meters and 11 holes (17 %) at depth more than 300 meters. The minimum and maximum depths to mineralization ranged from 12 to 592 meters below the surface and the average depth to maximum radioactivity was 177 meters. This data indicate that much of the mineralization occurs at relatively shallow depths. The drilling summaries are listed in the Appendices I, II and III and the basic statistical data and highlights are summarized in tables 4 and 5 below.

Table 4: Summary of diamond drilling intersections

Range (% U)	0.01-0.02	0.021-0.03	0.031-0.05	0.051-0.07	>0.07
Number of intercepts/ave width*	131/2.17	44/3.5	27/4.5	7/3.6	3/2.7
Minimum/maximum width*	0.5/17.1	0.6/12.7	0.5/20.3	1.5/5.9	0.7/8.2

\* Apparent width (in meters; intervals less than 0.5 meters wide are not included in the table).

Table 5: Highlights of the best drill hole intersections

Hole #	Depth*	Width**	Ave U (%)	Alternative (w/%U)		Zone
744	10.2-13.7	3.6	0.030			S
799	287.3-290.4	2.8	0.058			K
808	36.4-42.3	6.0	0.039	1.8	0.0607	K
808	48.3-50.7	2.5	0.035	1.2	0.0535	K

# Technical Report for Preliminary Assessment of the Kalnica - Selec Project

808	56.9-65.0	8.2	0.072	4.0	0.12	K
871	96.0-109.2	13.2	0.031	2.0	0.081	K
871	124.9-132.7	7.9	0.0663	4.2	0.113	K
882	31.2-35.0	8.5	0.04	1.8	0.055	S
909	463.4-492.4	20.3	0.035	9.4	0.051	KD
946	323.4-332.2	9.0	0.021	1.0	0.06	KD
946	333.9-340.9	7.2	0.029	1.7	0.05	KD
947	373.6-385.6	10.0	0.029	2.6	0.051	KD
852	135.1-143.1	8.1	0.026	1	0.108	S
955	194.8-209.5	14.8	0.045	4.2	0.09	S
955	172.4-174.1	1.7	0.066			S
955	366.1-372.4	6.4	0.044	4.4	0.05	S
979	163.7-169.5	5.9	0.053			S
980	243.9-245.3	1.5	0.061			S
1026	305.9-308.9	3.1	0.06	1.6	0.1	S
1033	52.9-58.1	1.9	0.044			K
1034	67.6-69.1	1.5	0.087			K
1036	68.9-81.1	12.3	0.04	1.3	0.103	K
1036	102.5-104.3	1.9	0.05			K
1039	88.2-107.0	13	0.042	1.4	0.0810	K

\* - depth from collar (in meters); \*\* - apparent width (in meters); K – Kalnica zone, S – Selec zone; KD – Krajna dolina zone. Alternative (w/%U) – width for higher grade within the same interval.

Shallow drilling and trenching also intersected a number of mineralized lenses and/or increased radioactivity zones. Out of 172 shallow drill holes, 55 intersected mineralized lenses and 38 cut through anomalous radioactivity zones. In 35 out of 58 trenches, zones of anomalous radioactivity were uncovered. More information on these intersections is presented in the Appendix III.

By 1980, adits Nos. 60 and 61 in the Kalnica zone followed four mineralized bodies numbered 1, 4, 7 and 9, containing economic uranium resources (Figs. 11, 12, 16-20). The mineralization below adit No. 60 was tested by a relatively dense network of drill holes and based on the results, UP decided to mine these mineralized bodies out to obtain information on the spatial distribution of different ore classes and uranium accumulations. Due to its length, mineralized body No. 1 was split in two blocks 1a and 1b (Komon, 2005a). Another aim was to provide representative samples for the ore processing trials and to check on the previous favourable trials on the mineralized bed II.A material, which resulted in extractability 85 – 95 %. Slightly lower extractability was achieved with the mineralized bed I materials.

Resources in C<sub>2</sub> category<sup>1</sup> were calculated for all five blocks, based on the channel sampling, radiometric surveys and down-hole logging from surface and underground drill holes. The projected and real production is listed in table 6. The recovery rate from the Kalnica blocks was found to be very good and because of favourable distribution of

<sup>1</sup> Correlative with inferred resources in CIM classification

# Technical Report for Preliminary Assessment of the Kalnica - Selec Project

the mineralization in the host rock, the actual average grade and tonnage reached 2.7 % higher values than the estimate.

In 1983, test mining also took place in the Selec zone from one mineralized zone situated at the adit No. 62 level and four meters above it (Fig. 13). The recovery rate from this zone was lower than in Kalnica, mainly because of compositional inhomogeneity and frequent admixture of low-grade material resulting in lower metal production. Thus, the recovery rate of this zone reached 97.3 % and the metal content 78.4 % of the projected figures. However, UP did not consider these numbers as representative because the amounts of mined and processed ore were limited. The real metal production numbers were not reported because the processing plant in Mydlovary (Czech Republic) did not release the data (Stimmel et al., 1984).

The following table from the historic report by Stimmel et al., (1984) lists the projected and real production numbers from the Kalnica – Selec area mines.

Table 6: Projected vs. Real Production

Sector	Block #	Projected production				Real Production				Ore S		
		V (m <sup>3</sup> )	Q (t)	C (%)	q (kg)	V (m <sup>3</sup> )	Q (t)	C (%)	q (kg)	Q (t)	C (%)	q (kg)
Adits #s 60, 61	1a	632	1700	0.055	555	766.3	2010	0.0556	1119.0	275	0.019	53.1
	1b	1462	3950	0.060	2369	905.7	2445	0.0552	1350.0	804.4	0.017	139
	7	63	172	0.1	172	464.3	1200	0.0802	961.9	117.4	0.013	15.1
	9	8	23	0.060	13.6	40.0	105	0.0550	57.9	70.3	0.013	8.6
	4	260	702	0.040	280.8	356.7	963	0.0410	392.4	891.7	0.016	145.9
	Total	2425	6547	0.0578	3790.4	2490	6723	0.0578	3886.3	2041.4	0.017	346.8
	C.E 60						721	0.047	336.0	15000	0.017	266.3
	C.E 61						64	0.041	26.5	341	0.018	60.2
	Kalnica						7508	0.057	4248.8	3962	0.017	673.3
Adit # 62	62/1	997	2622	0.054	1416.0	970.0	2551	0.0435	1109.7	1180	0.017	201.0
	C.E.						393	0.045	175.4	530	0.018	89.6
	Selec						2944	0.0436	1285.1	1710	0.017	290.6
<b>Total P.Inovec</b>		<b>3422</b>	<b>9169</b>	<b>0.057</b>	<b>5206.4</b>	<b>3460.0</b>	<b>10452</b>	<b>0.053</b>	<b>5533.9</b>	<b>5672</b>	<b>0.017</b>	<b>963.9</b>

Abbreviations: V – volume (in cubic meters); Q – ore quantity (in metric tonnes); q - uranium quantity (in kilograms); C –content of uranium in the ore (in %); S – low-grade ore; C.E - concurrent exploitation of low-grade ores.

Reportedly, test mining from exploration adits in the Kalnica and Selec areas produced a total of 10,452 tonnes ore @ 0.053 per cent uranium (Stimmel et al., 1984). The exploration and test mining in the area continued until 1983. UP planned to follow up in the Krajna dolina zone, but in 1984 a decision came to stop the operations in the area, mainly because of low price of uranium rendering the reserve in No. 60 adit non-economic. In the early 1990s, the Government stopped subsidies to the exploration and mining industry and the Kalnica – Selec uranium prospect lay dormant since that time.

In 1992 the Ministry of the Environment of the Slovak Republic commissioned Uranpres s.r.o. to conduct a radiometric survey in the surroundings of adit Nos. 60, 61 and 62, to assess the extent and degree of radioactive contamination due to past uranium



mining. The survey was carried out along north – south running profiles with stations spaced 5 meters over areas about 300 by 340 meters, including dumps of mine waste and non-pay (class “S”) uranium ore (Daniel, 1992).

Most radioactivity values in the areas farther from the adits ranged from less than 1.5 pA.kg<sup>-1</sup> to 2.5 pA.kg<sup>-1</sup>. Increased values were detected on the dumps and near mineralized outcrops and the maximum values X – 13 pA.kg<sup>-1</sup> and X - 22 pA kg<sup>-1</sup> were measured near adit No. 60 and about 130 m east of adit No. 62, respectively. Groundwater contamination was not observed, probably thanks to impermeable foil that was placed on the ground before dumping the materials. Based on the results, the author (Daniel, 1992) recommended to avoid using these affected areas and the dump materials for construction purposes.

## 7. GEOLOGICAL SETTING

Považský Inovec Mts. form a northeast-north – southwest-south trending mega-anticlinal horst made up of Early to Late Paleozoic, Mesozoic, Tertiary and Quaternary formations. Early Paleozoic crystalline rocks form a massive core cropping up mainly in the eastern part of the mountains. Late Paleozoic rocks are exposed only in the northern part of the mountain range and form an envelope to the crystalline core. Permian rocks crop out in a belt about 20 kilometers along strike and as much as 4 kilometers wide (Komon, 2005a).

Mesozoic suites are composed mainly of carbonate rocks of the Križna and Choč Nappes cropping out in the southern portion of the mountain range. The Hradok Fault divides the region into northern and southern segments. The east vergent thrust faults striking northeast-north are an important feature of the northern part of the mountain range. The younger faults separate the Považsky Inovec Mts. from the adjoining Neogene sedimentary basins.

Mihál' and Felber (1973) mapped the area at 1:10,000 scale and distinguished four uranium-bearing, litho-stratigraphic formations, namely the Chalmova, the Klenkovsky vrch, the Selec and the Krivosúd Formations. They are of Permian age and together they form the Kalnica Group (Figs. 4, 4a, 5, 6).

The basál, Chalmova Formation is a 150 – 200 meters wide formation of Early Permian age extending from Chalmova to Husárov stánok and overlying the Late Carboniferous Novany Formation. Much of the upper part of this formation is made up of polymict conglomerate, siliceous sandstone, crystalline schist and grey-green sandstone. The U-mineralization in it was dated at  $280 \pm 30$  Ma (Archangel'ski and Daniel, 1981).

The Klenkovsky vrch Formation is composed of violet shale, sandstone and subordinate dolomite outcropping between Klenkovsky vrch and Hlboka kopanica in an area 6.5 kilometers long and 600 meters wide.

The Selec Fm crops out in a belt 8.2 kilometers long and 100 to 800 meters wide, in the surroundings of Selec village and in a part of Prostredna dolina. The extent of this formation is structurally controlled, mainly by the Selec thrust. Its lower part is made up of polymict conglomerate alternating with greywacke - arkosic sandstone with some volcanic admixture. These sediments are overlain by grey, coarse-grained sandstone intercalated with violet shale and greywacke. The upper part of the Selec Formation is characterized by significant proportion of volcani-clastic material. The Selec Fm ends with a 20 to 100 meters thick, grey and green-grey, arkosic sandstone. The age of the formation is  $280 \pm 30$  Ma (Saxonian).

The Late Permian Krivosud Formation extends from Bodovsky potok creek to Lašid (ground elevation 469.7 meters) in a belt 5.5 kilometers long and 0.5 – 1 km wide, made up of psammite with transitions to psephite. Two developments were distinguished, but their composition is almost identical. A typical feature is red-brown pellets of hematitized volcanic material (rhyodacite) in the sediments. Evaporites (gypsum, anhydrite) associate with the Krivosud Fm. sediments and always occur in tectonic positions (Komon, 2005a).

During the Permian period volcanism and its products played a crucial role in the formation of Permian strata and the U mineralization is spatially and genetically associated with it. The Kalnica Group formations contain various proportions of volcanogenic rocks and have bi-lateral litho-facial developments separated by the Selec thrust. The Kalnica Group rocks are predominantly green in colour, with subordinate violet, green-grey or grey tints. The proportion of volcani-clastic material in the sediments may locally prevail over the terrigenous material. Sulphidic impregnations, mainly pyrite, occur commonly. The volcani-clastic rocks and the grey-green conglomerates and sandstones host the beds with U mineralization. Total thickness of the group is 1500 – 1800 meters. There is no paleontological evidence to support the age of the Kalnica Group rocks (Komon, 2005a).

The structure of the region is complicated by the nappe tectonics and by the presence of several significant faults and thrusts. In the southern part of the region the mineralized bodies occur in tectonic shingles extending from Hôrčanska dolina to Kalnica – Zlatník fault. To the north of this fault the mineralized beds dip in monoclinal fashion to the west, conformably with the Selec thrust (Komon, 2005a).

## **8. DEPOSIT TYPES**

The Kalnica-Selec license area contains two mineralization styles, the stratiform uranium, and the hydrothermal-sulphidic. Most probable, primary sources of uranium were the products of Permian volcanism and possibly the igneous rocks that supplied the depositional basin with high to low-energy clastic sediments. The U mineralization appears to be a result of concentration of an originally very low-grade, dispersed, or only slightly concentrated mineralization grading probably 0.005 to 0.04 % U. The radiometric dating indicates a development of poorly concentrated, low-grade U mineralization within the Selec Formation from a volcanic source and related processes during the Early Permian stage. Stepping-up of variation curves at about 160

Ma may reflect the concentration of U mineralization due to diagenetic and epigenetic processes.

The main period of uranium mineralization probably took place between 70 – 105 Ma ago (mid Cretaceous to the end of Eocene), which corresponds to the onset, peak and fading of the main phases of the Alpine Orogeny. The substantial accumulation of the uranium minerals most probably occurred due to re-mobilization and the mineralization itself should therefore be classified as polygenetic. The primary formation period was dated at about 160 Ma and was interpreted to reflect the concentration of uranium minerals within the lithifying sediments (Archangel'ski and Daniel, 1981).

Uranium mineralization at Kalnica – Selec resembles other strata-bound, Permian hosted U (Cu-Mo) deposits and occurrences of the Western Carpathians (Fig. 24) including Novoveska Huta, Kluknava and Jahodna situated in the Volovec Hills (the Spisskogemerske rudohorie Ore Mountains) and Kozie Chrbty (Svabovce, Spissky Stiavnik, Kravany and Vikartovce) (the Nizke Tatry Mts.). Less important uranium accumulations occur in the Late Carboniferous and Early Triassic volcani-sedimentary formations (Grecula et al., 1997). The only workable deposit in the past was Novoveska Huta, which was previously mined for copper (Kantor, 1959). The high-grade Jahodna prospect (1,250,000 tonnes @ 0.56 % U) may become a workable deposit in the future (Pelham et al., 2006). The other smaller deposits, such as Kozie chrbty and Kalnica – Selec were test-mined (Balaz et al., 2004).

The discovery of the radioactive anomalies in the Kalnica – Selec area by early airborne and ground radiometric surveys was possible because some parts of the mineralization occur at the surface, or at shallow depth. The mineralizations at depth, such as that in the Krajna dolina lying 330 to 500 meters below the surface, have no radiometric response and do not show on the radiometric map (Fig. 7). This indicates that the Kalnica – Selec license area may contain other deep seated, or blind mineralized bodies that have very little, or no gamma signature at the surface.

Metallogenetically, the West Carpathian uranium deposits appear to be analogous to the Saddle Hill uranium deposit in Mongolia, which was classified as a sedimentary, strata-bound and re-placement uranium deposit. The Mongolian deposits occur within the Saddle Hill Basin and include Gurvanbulag, Mardaigol, Khavar, Dornod and Ulaan deposits. All occur as multiple horizons of anomalous uranium mineralization within flat lying to gently dipping structures, coincidentally paralleling the bedding of Mesozoic sediments and volcanic rocks. In addition, uranium mineralization occurs as structurally controlled, steeply dipping to vertical zones, which may connect with the strata-bound zones (Harper, 2005).

## 9. MINERALIZATION

Uranium mineralization in the northern part of the Považsky Inovec Mts. belongs to a belt of strata-bound uranium ( $\pm$  copper, molybdenum) deposits and occurrences hosted by the Late Paleozoic ( $\pm$  Early Mesozoic) volcani-sedimentary rocks of the Western

Carpathian Mts. (Fig. 24). The mineralized bodies and radioactive anomalies within the Kalnica – Selec license can be classified as follows:

- „classic type“, occurring within the Selec Fm., and representing the products of rhyolite volcanism, designated as the mineralized beds I. and II;
- „cupriferous sandstone“ occurring also within the Selec Fm., but in the hanging wall of the main, uranium collector formation, mineralized bed I;
- sorption type, associated with limonitized zones, originally mineralized with pyrite and hematite of Ra-U character occurring in phyllite and/or diabase tuff, respectively, both of Carboniferous age.
- Th-K type genetically associated with the sites of increased metasomatism within the crystalline schist.

The information from exploration adits # 60 and 61 (Figs. 11, 12) and from the exploration drillings (Figs. 8, 9, 10, 15, 16, 17, 18, 19 and 20) indicated the presence of 15 mineralized bodies within the Kalnica zone, of which 10 were reported to contain significant uranium mineralization (Stimmel et al., 1984, Komon, 2005a). The lithological, structural and technological information on these mineralized bodies is listed in the tables 7 and 8 below:

Table 7: The Ore-bodies, Lithology, Attitudes and Intercepts

Miner. body #	Host rock	Dip	Intercepts in adit # 60, crosscuts and drill holes
1	Green-grey arkose/conglomerate	30-45E	S-II, R-3, R-4, K-2-22.
2	Green-grey arkose/conglomerate + tuffite	30-40SE	R-2, GP7/60
3	Green-grey arkose/conglomerate + tuffite	30-40SE	R-4, GP16/60
4	Green-grey tuffite, tuff	60SE	R-4-2, GP1,2,7,13
5	Green-grey tuffite sandstone, tuff	45SE	R-4-3
6	Green-grey tuffite sandstone, tuff	20SE	R-4,R-4-0,R-4-1,GP2
7	Green-grey/arkose tuffite sandstone, tuff	?	R-9,K-2-27a,b
8	Yellow-green tuffite sandstone, tuff	20SE	S-II, GP-22/60
9	Yellow-green tuffite sandstone, tuff, pyritiz.	10SE	S-II, R-13
10	?	35SE	GP-23/60
11	Green-grey arkose/conglomerate	30-40SE	S-II, R-16,18,19,21,GP33,..
12	Green-grey arkose/conglomerate	40-50SE	R-18, K-2-22,K-2-22a
13	Green-grey to grey arkose/conglomerate	30SE	S-II, R-29, GP-42/60
14	Grey arkose/conglomerate	40SE	S-II, R-28
15	Grey-green tuffitic sandstone	30SE	S-II,

Table 8: Parameters of the Mineralized Bodies in the Adit No. 60

Mineral. body #	Length of MB (m)	Ave. width* of ore S+U+A (m)	Ave. content of U (%)	Ave. width of ore U+A (m)	Ave. content of U (%)	Miner. Bed
1	130	4.56	0.033	2.88	0.061	II.A
2	105	0.42	0.019	-	-	II.A
3	50	2.02	0.023	0.52	0.034	II.A
4	160	2.61	0.014	1.65	0.037	I

# Technical Report for Preliminary Assessment of the Kalnica - Selec Project

5	25	0.52	0.018	-	-	I
6	50	1.32	0.019	0.52	0.037	I
7	50	2.96	0.019	1.08	0.13	I
8	80	0.89	0.014	0.32	0.036	I
9	50	1.71	0.028	0.72	0.08	I
10	40	1.62	0.018	-	-	I
11	300	2.01	0.021	0.45	0.037	II.B
12	300	6.6	0.019	0.94	0.031	II.B
13	210	5.2	0.011	-	-	II.B
14	80	2.5	0.011	-	-	II.B
15	35	2.6	0.019	0.7	0.036	I

\* Not known if true or apparent; S – low-grade ore; U + A – high-grade ore;

Seven mineralized bodies were found in the Selec zone, and one of them was test mined (Figs. 13, 14, 14a, 14b, 15). The mineralized zones were as much as 250 meters along strike, up to 5 meters wide and up to 200 meters down dip (Komon, 2005a).

Generally, the mineralization occurs in two beds designated as mineralized bed I and mineralized bed II. Mineralized bed I is made up of alternating green-grey and green ashy and sandy tuffite, tuff and scarce pellet and lapilli tuffs (agglomerates). Mineralized bed II.A is composed of alternating grey and green-grey sandstone and conglomerate with a high amount of acid volcani-clastic material – tuffitic sandstone, tuffite and tuff with increased contents of potassium. Mineralized bed II.B comprises alternating grey, green-grey and green sandstone and conglomerate (locally violet in colour) with gradational bedding and small amounts of acid volcani-clastic material - tuffitic sandstone, tuffite, arkosic and greywacke sandstone and equivalent conglomerate with increased contents of natrium (Stimmel et al., 1984).

The mineralized bodies are lentiform in shape and conformable with the strike of sedimentary structures. They are commonly arrayed in an *en echelon* fashion and frequently truncated by faults or wedging out in the form of digitations (Figs. 11, 12). The mineralized bodies in the Kalnica zone appear to be controlled by an over-thrust structure (Figs. 4, 11, 19, 20).

Two mineralization styles occur in the Kalnica – Selec license area, the stratiform uranium and the hydrothermal-sulphidic. The former comprises pitchblende ( $\text{UO}_2/\text{UO}_3$ ), brannerite  $(\text{U,Ca,Th,Y/Ti,Fe})_2\text{O}_6$  and thorbernite  $(\text{Cu}(\text{UO}_2)_2(\text{PO}_4)_2$  forming disseminations in the volcani-sedimentary host rock, and the latter is represented by younger, carbonate-quartz veins with associated sulphides, including arsenopyrite, pyrite, bornite, digenite, galena, chalcopyrite, molybdenite, covellite, sphalerite and tetrahedrite. Quartz, dolomite and rutile are the most common gangue minerals. The oxidation zone contains iron oxides including hematite-specularite and goethite.

Drilling in the area also intersected evaporite beds and copper mineralization ranging in thickness from 0.1 to 1.7 meters and grading 0.11 – 1.21 % Cu (Komon, 2005a). The elemental associations comprise the main elements uranium, copper and lead, the

subordinate elements molybdenum, nickel and cobalt and the scarce elements yttrium and vanadium.

## 10. EXPLORATION

In 2005 and 2006 the Company followed the project that was filed with the application for the Kalnica – Selec exploration license with the Ministry of the Environment of the Slovak Republic. The project's objectives are:

- to compile the historic results and to design further exploration works based on the re-interpretation
- To conduct detailed gamma-spectrometric and supplementary geochemical surveys on the license area to delineate the uranium mineralized beds in detail;
- To prepare a final report with a proposal for further exploration works and remediation measures.

The compilation of the historic results included digitization of 65 diamond drill logs, down-hole radiometric logs, inclinometry, caliper, etc., vectorized in 10 centimeter intervals, each provided with co-ordinates. An example of digitized drill hole is on the Fig. 21. As well, topographic and geological maps and representative sections at 1:10,000 scale (Figs. 2 - 10, 14A - 20), geophysical maps (Figs. 7, 22, 23) and maps with locations of historic drill holes (Figs. 8, 9, 10) were digitized and/or scanned and relevant parts of the historic reports, including the reports by Stimmel et al., (1984), Mihál'. – Felber (1973), Janotka et al. (1985), Jančok et al. (1979) and Komon (2005a,b, 2006) were translated and/or scanned (Figs. 11, 12, 13, 14, 14b) and the figures are presented at the back of this report.

In 2005 and 2006, the ground radiometric surveys were conducted over the southern and northern portions of the license area (Fig. 7). The grid lines were spaced 250 meters and the stations 25 meters apart. The GPS' with pre-programmed station co-ordinates were used for navigation along the lines and from station to station. In the areas with dense vegetation and weak satellite signal a compass and a 25 meter line were used. The writer of this report took part in these surveys from October 19 to October 23, 2005 and from September 21 to October 2, 2006. During the former period, lines 1 to 6 were measured and during the latter the lines 29 to 38 were completed. Lines 7 to 10 were run by A. Mojzes in June 2006, without writer's participation.

Two GS-256 gamma spectrometers (manufacturer: Geofyzika Brno, Czech Republic) were used in the surveys (Figs. 25, 26). One GS-256 was rented from the Comenius University (CU) Bratislava and another from Koral s.r.o., Spišská Nova Ves. The former was operated by Asst. Prof. A. Mojzes Ph.D., Department of Applied and Environmental Geophysics, CU, during the periods June 2 - 12 and September 21 – 25 and the latter by J. Komon Sr. during the periods October 19 – 23, 2005 and September 26 to October 2, 2006. The survey assistants were alternatively J. Basista, M. Kostka, J. Holotnak, J. Burocy, M. Endel and J. Komon, Jr.

## Technical Report for Preliminary Assessment of the Kalnica - Selec Project

The instruments were calibrated before and after each shift at a point about 50 meters south of the station 71 on line 38. The instruments are also subject to annual routine calibrations at the Uranovy pruzkum in Bratkovice u Píbrami, Czech Republic. The writer of this report confirms that both operators are highly skilled geophysicists with many years of field experience in the gamma spectrometry and result interpretations.

GS-256 is a four-channel, differential gamma-spectrometer composed of measuring and detection units (Figs. 25, 26). Essential part of the latter unit is a sodium iodide crystal (7.6 cm in diameter, volume 347 cm<sup>3</sup>) of cylindrical in shape that is activated by thallium and optically connected with a highly stable photo-multiplier with metallic shielding. The probe contains a high impulse receiver. The impulses are agitated by Ba<sup>133</sup> isotope that is placed in a metallic envelope. The gamma quanta are converted in the sodium iodide crystal to light flashes – photons, which are in turn converted to electric impulses in a photo-multiplier.

GS 256 is a hand-held, low-weight unit fed by eight alkaline batteries. If provided with the calibration it is capable of direct converting the spectra to metal contents, in ppm for uranium and thorium and in per cent for potassium. The measurement time at each station is 2 minutes. The uppermost, humic soil (A-horizon) is removed before the measurement. In 2005, the total number of measured stations was 612 (lines 1-6) and in 2006 the total was 1862, of which 467 were measured in the southern portion of the license area (lines 7 - 10). Based on the survey results, the average background values for the whole license area were calculated and are listed in the table below (Komon, 2006).

Table 9: Statistic data for uranium, thorium and potassium

Kalnica and Krajna dolina Zones			
Item	Uranium	Thorium	Potassium
Number of items	1082	1082	1082
Number of dummies	1	1	1
Minimum value	1	3.2	0.8
Maximum value	28.4	18.5	5.7
Mean value	3.14011090573	9.722550831793	2.130776340111
Standard deviation	1.086439493942	2.247121657678	0.616610312438
Arithmetic sum	3397.6	10519.8	2305.5
Selec Zone			
Number of items	1389	1389	1389
Number of dummies	16	16	16
Minimum value	0.69	1.7	0.6
Maximum value	13.02	23.89	5.91
Mean value	3.739827213823	11.27478761699	2.029856011519
Standard deviation	0.925301009724	2.559394046163	0.557236886389
Arithmetic sum	5194.62	15660.68	2819.47

Based on the radiometric survey, a digital mono-elemental map was prepared for uranium, thorium and potassium (Fig. 7). The map shows several, near-surface, north -

south trending uranium anomalies in the southern and northern portions of the license area. In the Kalnica zone, the anomalies occur in the surroundings of exploration adits 60 and 61, in the Kalnický potok and in the southeastern extremity of the license area. In the Selec zone, an almost one kilometer wide anomalous strip runs north of the Selec village, along both sides of the Selecký potok creek.

All but one anomaly in the Kalnica zone are underlain by sediments and volcanics of Early Permian age, and the remaining anomaly in the southeast corner of the license area appears to be underlain by Carboniferous sedimentary rocks. Most anomalies cluster around the old exploration adits and diamond drill holes, where the uranium mineralization occurs close to the surface. The mineralization in the Krajná dolina does not show on the map, apparently because it is too deep to have a detectable response at the surface.

The uranium anomalies are flanked by strips of non-radioactive quartzite, siliceous sandstone and carbonate rocks of the Early to Middle Triassic age, and/or by high-potassic rocks with increased contents of tuffaceous material of Permian age (Fig. 4). Both, radioactive and non-radioactive rocks strike north to north-northeast, conformably with the regional structure of the area.

In addition to the grid survey, gamma-spectrometric measurements were also made on the old dumps and on the outcrops adjacent to the adits Nos. 60 and 62. The values on the dump adjacent to the adit No. 60 ranged from 6.1 to 23.3 ppm U (average 14.3 ppm U) and the outcrop above the adit collar gave 8.3 ppm U. The values on the dump at the adit No. 62 ranged from 25.1 to 80.3 ppm U (average 55.1 ppm U) and the values at the outcrops on both sides of the adit ranged from 25.4 to 52.3 ppm U (average 37.1 ppm U). The values along a line of outcrops above the adit 62 ranged from 6 to 43.8 ppm U (average 17.2 ppm U). The above values exceed the average background gamma value for the license area by 2 to 23 times.

Concurrently with the radiometric surveys the writer conducted geological mapping, structural studies and minor litho-geochemical sampling. Field observations confirmed Permian volcano-sedimentary rock formations including conglomerate, sandstone, shale with tuffitic admixtures as the most frequent sources of anomalous radioactivity. On the other hand, Triassic quartzite and carbonate rock formations commonly yielded very low radioactivity. In the Selec zone some measured values, particularly those obtained about one kilometer north-east and north-west of the adit No. 62, appeared to be slightly influenced by the local topography. Such effects were described by Killeen (1979) from other uranium deposits.

Increased potassium values in some areas indicated an outcrop, or a proximity to Permian sandstone and conglomerate with high contents of acid volcaniclastic material, such as tuff and/or tuffite, or superimposed feldspathization. Thorium was slightly increased in the northernmost portion of the license area, where it may be caused by more frequent brannerite and/or REE minerals. A small thorium anomaly occurs in the south-western portion of the license area, where it is probably genetically related to a



zone of intensive metasomatism in the crystalline schist. The mean background value for thorium in the license area is 10.6 ppm and most increased values are only a few p.p.m., above the background values. The maximum value for thorium itself (23.9 ppm) is only slightly more than twice the background and does not indicate significant accumulation of thorium-bearing minerals.

The attitudes of bedding, schistosity, foliation, fault planes and lineation were measured at the outcropping Late Paleozoic and Mesozoic formations and some of them indicated distinct superimposed deformation related to the Late Mesozoic, and/or Early Tertiary collisional events. The above formations originally formed an autochthonous envelope on the Early Paleozoic crystalline rocks, and were affected by folding, thrust faulting, shearing and mylonitization, which frequently had an impact on the re-distribution of the uranium mineralization. Most observed post-depositional deformation structures strike north-south with smooth deviations to the west or east and dips to the west. On the other hand, most Permian and Triassic formations dip alternatively to the west or east.

According to historic interpretations the mineralized bodies in and around Kalnica adits occur in a large, fold-like structure composed of fault-bound blocks and shingles that are stacked together along a sigmoid, south-west to southeast trending, thrust structure (Figs. 4, 11, 17-20).

Recent mapping confirmed the earlier conclusions by Mihál' and Felber (1973) that the deformation processes had a strong impact on the structure and on the re-distribution of the uranium mineralization (Figs. 19, 20). The future structural studies should further address these features to improve the knowledge of the structural controls of the mineralization in order to better situate the exploration drillings. The structural data obtained during recent survey are listed in the table below.

Table 10: Structural and Lithological Data

Line/station	Attitude	Lithology
1/1100	40/35SE	Grey finely bedded sandstone (Permian)
1/600	130/35 SW	Green-grey slate (Permian)
6/2475	165/30 WSW	Ultramylonite
6/2450	20/45 WNW	Quartzite (Triassic?)
5/2375	350/30 E; 60/40 NW (lineation)	Ultramylonite, silicified
5/2000	80/45 S	Conglomerate (pebbles <2cm across, Perm.)
37/20	10 (strike of elongated ridge)	Quartzite, silicified conglomerate (Triassic)
36/22	140/30 SW (140/30 SW)	Quartzite (+quartz vein 15 cm wide) (Trias.)
Adit 62	0±10/30-35 W	Brown sandstone/conglomerate (Permian)
29/19	170/30 W	Silicified quartzitic conglomerate (Triassic)

During field surveys the writer collected six anomalous rock samples from the old dumps adjacent to adit No. 60 and from the outcrops near No. 62 adit. The sample details and the assay results are discussed in the following items.

## **11. DRILLING**

No drilling was conducted in the Kalnica – Selec license area recently. The historic drilling results are described in the History chapter.

## **12. SAMPLING METHOD AND APPROACH**

During the 2005 and 2006 field surveys and mapping the writer collected six anomalous samples using the spectrometer, and recorded the readings in order to compare them with the chemical analyses. In the Kalnica zone, three anomalous grab samples were taken from the old dump adjacent to adit No. 60 and in the Selec zone, three chip samples were taken from the outcrops adjacent to adit No. 62 (Fig. 9). The area covered by sampling in the Kalnica zone was approximately 50 by 100 meters and the intervals between the samples were about 50 meters. The samples probably represented very low-grade ore from adit 60, but their original locations are not known. The area covered by sampling in the Selec zone was about 50 by 20 meters and the samples were spaced about 25 meters.

The chip samples with relatively strongest radiation were collected from the outcrops near the adit No. 62, along a line running east – west and the distance between the end samples was about 50 meters. General strike of the beds in the sampled outcrops was 5° and the dip 30-35° to the west. The estimated width of the sampled zone was 25 to 29 meters, and it extended farther east and west. The writer together with A. Mojzes also made a string of measurements above the adit collar, where the anomalous volcani-sedimentary rocks outcrop in a form of a topographic elevation. Nine measurements from this area ranged from 6 to 43.8 ppm uranium.

The chip samples are made up of sandstone, conglomerate and tuffitic sandstone of grey colour with green or brown tints. One sample was strongly weathered and limonitized and another was silicified. One chip sample was split in two parts to represent the field original and duplicate in order to independently check on the reproducibility of the assays.

All samples were placed in standard polypropylene bags, provided with tags with sample numbers and closed with flagging tape. The samples were kept in a safe place until dispatched to the laboratory. The sample locations were recorded using GPS in WGS-84 projection.

## **13. SAMPLE PREPARATION, ANALYSES AND SECURITY**

The grab samples were collected using a geological hammer and the chip samples were taken with a hammer and chisel. The samples were not modified after collection. The writer dispatched the samples to accredited Geoanalytical Laboratories of the Dionyz Stur Institute of Geology in Spisska Nova Ves (GL). GL is ISO STN EN ISO/IEC 17025:2005 accredited by the international accreditation system ILAC – MRA and also serves as a reference laboratory to the MESR. In 2006 the writer personally visited the

GL to review sample preparation and instrumentation and to discuss analytical matters. In the writer's opinion, the GL has modern analytical equipment and technology, which is operated by qualified personnel and sample preparation, security and analytical procedures comply with the terms of accreditation that was granted to GL by the ILAC - MRA.

The laboratory prepares samples for assays as follows: drying of basic sample at 40 °C; first crushing in a jaw crusher to grain size <10 mm; first quartation; second crushing in a jaw crusher to grain size < 4 mm; second quartation; grinding in a cylinder mill to grain size <1 mm; third quartation; fine preparation in planetary or vibratory mills to grain size <0,09 mm and <0,063 mm; pulverization of remaining above-mesh fraction; homogenization (mixing) and packaging of analytical sample and duplicate.

Sample preparation included the use of barren materials to clean the sample preparation equipment between sample batches. The analytical accuracy and reproducibility is monitored using reagent blanks, reference materials and replicate samples. The writer took one field duplicate sample to have an independent check on the assay reproducibility.

GL assayed uranium and thorium using RFS method (lab. code PN-3.2) and K<sub>2</sub>O using AES-ICP method (lab. code PN-3.1). The sample descriptions, uranium assays and spectrometer readings are shown in the table below. The complete assay certificates and the list of standards are in Appendix IV.

Table 11: Sample Description and Uranium Determinations

#	Easting	Northing	Width*	Description	S. R.	Assay
94878	717791	5403631	(0.25)	Grey silic. sdst	30 ppm	65 ppm
94879	717798	5403657	(0.3)	Grey-green tfft sdst	87 ppm	73 ppm
94892	719315	5410510	0.6	Brown-grey sdst/congl	65.3 ppm	52 ppm
94893	729293	5410516	0.5	Brown-grey sdst/congl	45.6 ppm	39 ppm
94894	729342	5410521	0.8	Weath, grey-brown sdst	52.3 ppm	110 ppm
94895	717769	5403640	(0.3)	Grey sdst (yel/black inf)	22 ppm	5 ppm
94896	719315	5410510	0.6	Brown-grey sdst/congl**	65.3 ppm	45 ppm

Explanations: Silic. – silicified; tfft. – tuffitic; sdst.- sandstone; congl. – conglomerate; weath. – weathered; yel. – yellow; inf. – infiltrations; \* true width; \*\*duplicate of sample 94892; numbers in brackets are for grab samples; S.R. – spectrometer readings.

Assay values for uranium range from 5 to 110 ppm U, thorium values range from < 3 to 9 ppm and K<sub>2</sub>O ranges from 2.71 to 4.52 %. The differences in uranium assay values relative to spectrometer readings are believed to be due mainly to influences of the local rock environment. However, inhomogeneity of the original sample and the homogenization process by the laboratory, or the combination thereof, could also have played a role.

#### 14. DATA VERIFICATION

The Geoanalytical Laboratories' quality control included eight certified reference

materials for uranium, seven for thorium and three for  $K_2O$ . The reference materials included high and low grade samples. The reference materials are listed in the Appendix IV together with the 2005 and 2006 assay certificates. The writer has reviewed the check-up assays for uranium and found that values for eight certified reference materials differed from the referenced values by - 15.5 % to + 50 %, the largest difference being the value for the low-grade reference material GEOPT-2, which is by 50 % higher than reported by the manufacturer. Although, the differences in the high-grade reference materials were on average much smaller (up to + 17.6 %), the results may indicate a systematic error in the uranium assays toward higher values.

The differences between the measured thorium values for the certified reference materials and the manufacturer's values ranged from - 15.5 % to + 12.7 %, indicating a small shift to slightly lower values. The measured reference value for  $K_2O$  was 2.8 to 3 % lower than the value reported by the manufacturer.

The field duplicate sample No. 94896 returned a 13.5 % lower uranium value than the original. This difference may be due to inhomogeneity of the sample, or a result of the homogenization process, or a combination thereof.

Thus the overall assay reliability and reproducibility for the samples from the Kalnica-Selec license referred to in the present report would seem to be satisfactory, with the exception of the one low-grade check-up assay for uranium, which was 50 % higher than the reference value. A further check-up would be needed to explain this discrepancy; however, the writer is unable to do so before submitting this report.

## **15. ADJACENT PROPERTIES**

To the writer's knowledge there are no mineral licenses adjacent to the Kalnica – Selec license area. The nearest properties appear to be the thermal underground water sources held by Geoterm Beckov a.s. and the gravel pits near Nove Mesto nad Vahom, situated about 8 kilometers west of the Kalnica – Selec project.

## **16. MINERAL PROCESSING AND METALLURGICAL TESTING**

The historic report by Stimmel et al (1984) describes the processing tests that were made at the UGL Straz pod Ralskem using materials from mineralized beds I, and II. Parma and Cerny (1976) conducted mineralogical and petrographic studies of the samples. Bed I material was green-grey and green, ashy and sandy tuffite alternating with tuff and scarce pellet and lapilli tuffs (agglomerates). Bed II material was grey and green-grey sandstone alternating with conglomerate with a high content of acid volcani-clastic material – tuffitic sandstone, tuffite and tuff with increased contents of potassium. Mineralized bed II also included material II.B composed of grey, green-grey and green sandstone alternating with conglomerate (locally violet in colour), gradationally bedded and with small admixture of acid volcani-clastic material - tuffitic sandstone, tuffite, arkosic and greywacke sandstone and equivalent conglomerate with increased contents of sodium.

Hejl (1976) conducted the basic technological trials on mineralized bed I material and Polansky et al. (1977) tested mineralized bed II.A. The mineralized bed I sample grading 0.128 % uranium was obtained from mineralized body No. 7 in adit No. 60, cross-cut R-9 (Fig. 11). Both, acid and alkaline experiments were carried out, the former using  $H_2SO_4$  and the latter using  $NaHCO_3$ . The temperatures were 70 to 85 °C, k:p = 1.5 to 1.6, the granularity below 0.15 and/or 0.5 millimeters and the leaching times ranged from 4 to 68 hours. Long-term, up to 74 hours leaching was applied to both acid and alkaline methods and static experiments up to 35 days were also carried out.

Mineralized bed I materials were found to be fairly suitable for static acid leaching and amenable to dump, or underground leaching. The alkaline method was found to be ineffective due to low metal recovery. Mineralized bed II material was prepared by homogenizing 90 channel samples @ 0.032 to 0.053 % uranium from mineralized body No. 1 located in the adit No. 60. The acid experiments using  $H_2SO_4$  yielded average extractability 88 % within 6 hours, while the alkaline experiments using  $Na_2CO_3$  reached average extractability of 86 % within 3 days. The overall results indicated very good leachability of mineralized bed II material and amenability to dump leaching under lower temperature and using relatively small amounts of sulfuric acid (Hejl, 1976, Polansky et al., 1977 in: Stimmel et al, 1984).

In 1991 – 1993 the metallurgical testing was conducted on the mineralized materials from the Novoveska Huta, Porac and Jahodna deposits to find the most suitable processing method. Because the ores from these deposits are lithologically and mineralogically similar to ores in the Kalnica – Selec area, and the tests are potentially applicable to those ores, the results are briefly mentioned here. It should be noted however that testing also included molybdenum as a by-product of uranium, which was not considered as an ore mineral in the Kalnica – Selec area.

It was demonstrated that the combined pressure leaching in caustic soda and/or soda was economically and technologically most effective processing method resulting in 88 to 90 % recovery of uranium and 93 to 94 % molybdenum. In 1995 the method was further optimized by replacing 50 % caustic soda with lime milk and by recycling soda with ionexes. The best results were achieved with mineralized bed I material (Tulis and Novotny, 1996).

The recovery rate of the blocks in the Kalnica zone was found to be very good during test mining. Actual production was by 2.7 % higher than the calculated values for both grade and tonnage. On the other hand, the recovery rate of Selec blocks was less favourable due to frequent admixture of low-grade material, resulting in lower metal recovery. Generally, the estimated tonnages and grades were confirmed for the Kalnica zone, but for the Selec zone the tonnage was by 2.7 % and the grade by 21.6 % lower than the estimated numbers due to the above mentioned admixtures.

## 17. MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

The aim of the historic, "provisional" resource estimates was to assess uranium potential of the Považsky Inovec area. The geological block method was used and the resources were calculated in C<sub>2</sub> category (comparable to inferred resources in the CIM definition, see Appendix V). The individual mineralized zones were intrapolated or extrapolated according to metal contents, as established from the drill hole and/or adit intersections at similar altitudes, because the deposit was strata-bound in character. The estimate was made in three alternatives for the cut-off grades 0.015 % U, 0.030 % U and 0.050 % U. Planes for the individual mineralized bodies in the horizontal projection were obtained using a planimeter and for the Kalnica area the data was corrected using a formula  $S = S_0 / \cos \alpha$ , to accommodate for dip angle. The data for Selec area was used uncorrected due to the sub-horizontal attitude of blocks (Stimmel et al., 1984).

The average uranium content was calculated as a weighed average for the mineralized body widths in the drill intersections. No correction for extreme values was used. The average specific density value of 2.68 m<sup>3</sup>/t was used, based on 92 samples from the adits, pits and drill holes so that A, U and S<sup>2</sup> ore types were proportionally represented. The mean specific density value was derived from a histogram, where the majority of samples (57) fell within the interval 2.6 – 2.75 t/m<sup>3</sup>. The value was considered reliable, because the mean quadratic deviation  $\zeta = 0.06 \text{ t/m}^3$ , and the variation coefficient equaled 2.2 %.

The average moisture was determined as an average of 20 samples that were weighed before and after drying at temperature 105 °C. The resulting mean moisture value 0.32 % was considered too low to be included in the specific gravity value and was not used in the resource estimates. The mean exposition capacity and the mean specific resistivity were also tested on mineralized beds I, II.A and II.B materials and on three types of arkosic sandstone grading to conglomerate, the one with volcani-clastic admixture, the other with aleurolitic intercalations and the last with carbonate nodules. A coefficient of radioactive balance  $K_{rr} = 90$  was also used in the calculation.

Owing to "manual" character of the resource estimate, correction coefficient for disturbed radioactive balance was used in calculating the average contents of uranium in the mineralized bodies proper, but was not used in determining the individual economic intersections in the drill holes. The non-economic resource block contours  $C_k = 0.015 \text{ % U}$  were "condensed" and projected to a single plane.

The estimate took into account five mineralized bodies in the Kalnica zone (Figs. 11, 12, 16) and seven mineralized bodies the Selec zone (Figs. 13, 14, 14a,b, 15), all within and/or adjacent to the exploration adits Nos. 60, 61 and 62.

In addition, a "D1" category resource was estimated for the mineralization in the Krajna Dolina zone, which was tested by four neighbouring drill holes in the corners of a roughly 400 by 400 meters area. This mineralization was hosted by mineralized bed II.A

---

<sup>2</sup> U and A are high grade ores, S is low grade ore.

# Technical Report for Preliminary Assessment of the Kalnica - Selec Project

at depths 330 to 500 meters, and its dip angle was 40° west (Stimmel et al., l.c.). A review of historic uranium resources in the Kalnica, Krajna dolina and Selec zones is shown in the following table (after Stimmel et al., 1984):

Table 12: Historic Resource Estimates

Kalnica Zone											
MB #	Ck 0.030 % U					Ck 0.050 % U					
	V (m <sup>3</sup> )	Q (t)	T (m)	C (%)	q (t)	V (m)	Q (t)	T (m)	C (%)	q (t)	n0.03/n0.05*
1	35.428	94.948	2.74	0.055	52.2	9.703	26.004	1.55	0.105	27.3	24/14
2	29.526	79.130	3.7	0.086	68.1	16.565	44.447	2.62	0.132	58.7	17/11
3	12.954	34.716	3.68	0.068	23.6	10.152	27.210	5.6	0.135	36.7	5/1
4	9.777	26.204	1.68	0.065	17.6	2.611	6.997	1.07	0.107	7.5	5/3
5	20.475	54.873	3.5	0.071	39.0	6.687	17.920	2.15	0.135	24.2	8/4
Total	108.160	289.871	3.0	0.069	200.5	45.738	122.578	2.3	0.126	154.4	59/33
Non-economic block											
Ck 0.015 %											
V (m <sup>3</sup> )		Q (t)		T (m)		C (%)		Q (t)			
204,801		548,866		4.6		0.043		236.0†			
Krajna Dolina Zone (D1 Resource)											
"Prognostic"		982,000		2,632,000		3.01		0.061		1,605	

<b>Selec Zone</b>											
MB #	Ck 0.030 % U					Ck 0.050 % U					
	V (m <sup>3</sup> )	Q (t)	T (m)	C (%)	q (t)	V (m)	Q (t)	T (m)	C (%)	q (t)	n0.03/n0.05*
1	5.490	14.713	1.5	0.045	6.6						2/0
2	38.134	102.199	2.3	0.064	65.4	8.052	21.579	2.2	0.142	30.6	10/4
3	13.130	35.188	3.1	0.075	26.4	9.405	25.205	1.9	0.105	26.5	6/4
4	32.950	88.306	5.0	0.050	44.2	4.984	13.357	1.4	0.114	15.2	3/4
5	3.914	10.490	0.95	0.063	6.6	609	1.632	0.7	0.131	2.1	3/1
6	24.544	65.778	3.2	0.067	44.1	9.037	24.218	1.55	0.120	29.1	3/2
7	14.874	39.862	3.7	0.069	27.5	10.166	27.245	3.4	0.090	24.5	7/4
<b>Total</b>	<b>133.036</b>	<b>356.536</b>	<b>2.52</b>	<b>0.062</b>	<b>220.8</b>	<b>42.253</b>	<b>113.236</b>	<b>1.93</b>	<b>0.112</b>	<b>127.0</b>	<b>34/19</b>
<b>Non-economic Block # 1</b>											
<b>Ck 0.015 %</b>											
	V (m <sup>3</sup> )	Q (t)	T (m)	C (%)	q (t)						
	227,054	608,506	3.19	0.033	200.8						
<b>N-E block # 2</b>	<b>62.565</b>	<b>167.673</b>	<b>5.8</b>	<b>0.042</b>	<b>70.4</b>						
<b>Total</b>	<b>289.619</b>	<b>776.179</b>	<b>3.5</b>	<b>0.035</b>	<b>271.2</b>						

Explanations: MB – mineralized body; N-E – non-economic; V – volume (in cubic meters); Q – quantity (in metric tonnes); T – width of mineralized body (in meters); q – uranium quantity (in kilograms); C – content of uranium in the ore (in %); Ck – cut-off grade; † – "condensed" values re-calculated by J. Daniel; \* n 00.3 – number of intersections in the mineralized body with Ck 0.003 % U; n 00.5 – number of intersections in the mineralized body with Ck 0.005 % U;

**The readers are cautioned that the Company does not treat the above historic resources as the National Instrument 43-101 resources verified by the qualified person, therefore the historic estimates should not be relied upon.**

The area north-east of the calculated block in the Kalnica zone contains 10 well defined mineralized bodies and there are several areas with positive drill intersections in all three

zones that were not included in the estimate, because UP decided to abandon the area before such estimates could be made. But it is apparent that these areas contain additional uranium resources in the extensions of the calculated resource blocks and beyond and there is a good reason to believe that further exploration drilling could result in augmenting the historic resources.

## 18. INTERPRETATION AND CONCLUSIONS

The Kalnica-Selec license area is situated in the Povazsky Inovec Mts., in south western Slovakia, approximately 90 air kilometers northeast of Bratislava. The license area covers 2,889 hectares and has a good access and infrastructure. In the early 1960s Uranovy Prieskum discovered the radioactive anomalies in the Povazsky Inovec and followed up with exploration. In 1970s and early 1980s, more than 330 drill holes, about 65 pits and trenches and 3 exploration adits and cross-cuts totaling more than 2,500 meters were completed in the area. Uranium mineralization was found to be strata-bound and broadly similar to the other Permian hosted uranium deposits of the West Carpathians. In the early 1980s test mining took place from three adits in Kalnica and Selec zones and the production reached 10,452 tonnes @ 0.053 % U. Test mining was limited to the adit and cross-cut levels, and/or only a few meters beyond.

UP systematically conducted down-hole radiometric logging and determined uranium contents from the gamma log, caliper, mud density and other auxiliary data. The writer believes that down-hole logging was carried out by highly skilled and experienced personnel using up-to date technology, however, the check-up chemical analyses against which the down-hole surveys could be compared were not made systematically. Thus occasional errors cannot be ruled out and new re-interpretations based on the historic data should take account of this circumstance.

Past exploration works identified 15 mineralized bodies in the Kalnica zone, 7 mineralized bodies in the Selec zone and one mineralized body in the Krajna Dolina zone. The mineralized bodies are conformable with the sedimentary structures, lentiform, as much as 300 meter along strike, up to 6.6 meters wide and up to several hundreds meters along dip. They are commonly arrayed in *en echelon* fashion, or truncated by the faults, or wedged-out in the form of digitations. Mineralization occurs in the form of disseminations in two volcano-sedimentary units of Permian age that are locally cut by hydrothermal, remobilized, sulphidic veins with minor uranium mineralization. The mineralization in the Kalnica zone is emplaced within the faulted blocks that are stacked along a sigmoid thrust structure.

The main ore minerals are pitchblende, brannerite and thorbernite and the subordinate sulphides include arsenopyrite, pyrite, bornite, digenite, galena, chalcopyrite, molybdenite, covellite, sphalerite and tetrahedrite. Quartz, dolomite and rutile are the most common gangue minerals. Iron oxides commonly occur in the oxidation zone.

Metallurgical testing of mineralized bed II material from the Kalnica - Selec adits indicated very good leachability and amenability to dump leaching under relatively low



temperatures and low consumption of sulfuric acid. Further testing of the uranium/molybdenum ores from the East Slovakian deposits demonstrated that combined pressure leaching in caustic soda and/or soda and lime milk were effective for the mineralized bed I materials.

In 1984 a provisional resource estimate for the Kalnica, Krajna Dolina and Selec areas was carried out by I. Stimmel, J. Matus and other geologists experienced in the uranium exploration in Slovakia. The estimates for the Kalnica and Selec resources were in C<sub>2</sub> category and the estimate for Krajna Dolina resource was a "D1" category (a chart comparing the reserve/resource categories is in Appendix V). The calculations were limited to areas within and adjacent to adits in the Kalnica and Selec zones and were based on block model using three alternative cut off grades, 0.015, 0.030 and 0.050 % U. The resource block in the Krajna Dolina zone was calculated using cut-off grade 0.015 % U only and was supported by only four diamond drill holes spaced about 400 meters that intersected the mineralized horizon from 330 to 500 meters below the surface.

In the Kalnica zone, the estimate was based on a grid of drill holes spaced 50 to 100 meters, and on the information from adit Nos. 60 and 61, crosscuts and short underground holes. An estimate for five blocks in the Kalnica zone using a cut-off grade of 0.015 % U returned 548,866 tonnes @ 0.043 % U, containing 236,000 kg (520,144 lb)<sup>3</sup> uranium. At a cut-off grade of 0.03 % U an estimate of 289,871 tonnes @ 0.069 % U, containing 200,500 kilograms (441,902 lb) of uranium was calculated, and using a cut-off grade of 0.05 % U, a total of 122,578 tonnes @ 0.126 % U containing 154,400 kilograms (340,298 lb) of uranium was calculated.

In the Selec zone 7 blocks with a cut-off grade of 0.030 % U were estimated at 356,536 tonnes @ 0.062 % U, containing 220,800 kilograms (486,643 lb) uranium. The same blocks with cut-off grade 0.05 % U were estimated at 113,236 tonnes grading 0.112 % U and containing 127,000 kilograms (279,908 lb) uranium. The low-grade "condensed" block with a cut-off grade 0.015 % U was estimated at 776,179 tonnes @ 0.035 % U, containing 271,200 kg (597,725 lb) uranium.

In the Krajna Dolina zone, an estimate was made for a block measuring roughly 400 by 400 meters, situated at a depth of 330 to 500 meters. This "D1" resource for a cut-off grade 0.015 % U was estimated at 2,632,000 tonnes ore @ 0.061 % U containing 1,605,520 kilograms (3,537,420 lb) uranium.

**The readers are cautioned that the Company does not consider the above resources as National Instrument 43-101 compliant resources verified by a QP therefore, the historical resources should not be relied upon.**

The resource estimates were limited to areas within and adjacent to the adits Nos. 60, 61 and 62 and several areas in the extensions of the resource blocks with positive drill

---

<sup>3</sup> Re-calculated by J. Daniel (pers. comm.)

intersections (Figs. 9, 11, 12, 13, 15 - 20) were not included in the estimate because the holes were situated too far from the calculated blocks.

In the Kalnica zone, the area extending about one kilometer to the north-east from the established historic resource block, including 10 mineralized bodies numbered 6 to 15 (Tables 7, 8, Figs. 11, 16), was not included in the estimate. Furthermore, deep drill holes 742, 746, 799, 801, 809, 872, 873, 1029 and 1038 and 36 shallow holes with significant intersections are all situated outside the historic resource block (Figs. 9, 11, 12, 16 - 20, Appendix II ). The hole 799 for instance includes a 2.8 meters thick mineralized bed containing on average 0.058 % uranium.

In the Selec zone, drill holes 856, 915, 952, 955, 963, 965, 967, 966, 969, 1024, 1026 and 1048 with intersections grading 0.015 to 0.476 % uranium are situated outside the historic resource block (Figs. 9, 13, 14, 15, Appendix II) and as such were not included in the estimate. The drill hole 955 for example intersected 17 mineralized beds from 0.6 to 17.1 meters thick with mineralization grading from 0.01 to 0.143 % uranium (Table 5, Appendix II). A solitary drill hole 1026 situated about 1 kilometer south-west of the resource block (Figs. 8, 9) and about 400 meters south of Kozie (358.6 m) contained a 3 meter interval averaging 0.06 % U (maximum 0.3 % U). This hole may indicate a larger mineralized body.

In the Krajna dolina zone the holes 741, 910, 911 with significant intersections are situated outside the historic resource block. The future drilling program should target these areas to augment the historic resources.

Test mining confirmed the historic resource estimates for the Kalnica blocks (adits 60 and 61) in both, tonnage and grade. The recovery was good and the real average grade and tonnage were 2.7 % higher than the calculated values. On the other hand, the estimate for the Selec blocks (adit 62) was slightly overstated in tonnage and the grade was by 21.6 % lower due to admixture of low-grade material in the mineralized body, resulting in lower metal recovery.

Test mining continued in the Kalnica – Selec area until 1983, when UP decided to stop operations and to abandon the area because of low uranium price and availability of cheaper ores from the Novoveska Huta and from the Czech deposits. Since then, the exploration was not resumed in the area.

Before the “Velvet Revolution”, UP kept the information on all Slovakian uranium deposits and prospects top secret. In the early 1990s the secrecy was removed and the information is now available for review at the Uranpres s.r.o. in Spisska Nova Ves. The Company initially reviewed data from 167 diamond drill holes and selected 65 positive holes for further assessment. Subsequently, the Company commissioned Koral s.r.o. to digitize and vectorize the down-hole data, maps and other information in order to carry out computerized 3D modeling and re-interpretations.

The uranium mineralization at Kalnica – Selec is similar to other Permian volcani-sedimentary U (Cu-Mo) deposits in the West Carpathians, including Novoveska Huta, Jahodna and Kozie Chrbty (Fig. 24). Originally, these deposits probably contained very low-grade, disseminated uranium mineralization, which was re-mobilized during the post-depositional processes to form richer, strata-bound bodies. Metallogenetically, these deposits appear to be analogous to the Saddle Hill uranium deposit in Mongolia, which was classified as a volcani-sedimentary, strata-bound uranium deposit with minor, structurally controlled mineralization.

The 2005 and 2006 work program by the Company included scanning, digitization and vectorization of historic data and radiometric surveys and concurrent mapping and sampling in the southern and northern portions of the license area. Digitized data have been used for the follow-up re-interpretations, 3D modeling and re-assessment of the resources and representative maps, sections, logs, tables and appendices are included in this report.

The radiometric survey results have been used for the construction of a mono-elemental map of radioactive anomalies. In the Kalnica zone, the anomalies occur in the surroundings of exploration adits 60 and 61, in Kalnický potok and in the southeastern extremity of the license area. All but one anomaly are hosted by the Early Permian sediments and volcanics. The remaining anomaly appears to be hosted by Carboniferous sedimentary rocks underlying the southeast corner of the license area. In the Selec zone an almost one kilometer wide anomalous strip runs along both sides of the Selecký potok toward the Selec village, indicating a widespread outcropping and/or near-surface uranium mineralization.

Geological mapping that accompanied the radiometric surveys confirmed the volcano-sedimentary rocks of Permian age as being the sources of increased radioactivity. The anomalous formations alternate with the non-radioactive quartzite, siliceous sandstone and carbonate formations of Early to Middle Triassic age in the form of north to north-northeast trending strips, conformable with the regional structure. Structural observations confirmed the effects of deformation processes that resulted in large scale faulting, folding and thrusting. These processes appear to have had a strong impact upon the re-distribution of the mineralized bodies.

During the field surveys the writer collected six anomalous rock samples from the old dumps adjacent to the lower adit in Kalnica and from the outcrops near the Selec adit. Spectrometer readings at the sample sites ranged from 22 to 87 ppm U and somewhat correlated with the assay values, whereas the differences could be attributed to various effects of the rock background. One sample returned 110 ppm (0.011 %) U, a value close to the cut-off grade 0.015 % U.

In conclusion, the historic resource estimates were limited to areas within and adjacent to the adits and several areas in the extensions of the resource blocks with positive drill intersections were not included in the estimate. In the Kalnica zone, 10 mineralized bodies tested by the adits and by many deep and short drill holes potentially represent a

substantial additional resource. Many drill holes in all three zones that are situated outside the calculated blocks, and as such were not included in the resource estimates, contain significant mineralized intersected. Furthermore, historic test mining within the estimated blocks was limited to the exploration adit levels and a few meters below or above and most economic mineralization within these blocks was left untouched. All these mineralized bodies represent significant potential resources and make the case for further exploration of the Kalnica-Selec license area very strong.

Slovakia has a long and rich mining history and most of the country was explored in detail and many mineral deposits and promising targets have been discovered. However, after the Velvet Revolution the government stopped subsidizing the mining industry and reduced the exploration and/or development of discovered prospects to a minimum, thus creating a challenge for foreign investors. There are also many abandoned mines in Slovakia that are believed to contain potentially economic, remaining resources. Other favourable factors are that the country is now part of the European Union, has a stable government, healthy economy and the investments are safe to serve the intended purpose.

Uranium is the key fuel for nuclear energy and is a proven alternative to oil and coal for generating electricity. Recently, about 16 % of the world's electricity was being generated from nuclear energy and the price of uranium increased eight-fold compared to the price in 2000. For more than a decade the nuclear-power industry has consumed more uranium than has been mined. Demand is now much higher than supply and uranium has become one of the best-performing commodities. Conventional sources of energy are becoming more and more depleted and will not be able to meet worldwide requirements, therefore it is expected that demand for uranium will continue to be high. The other positive aspects are that nuclear power is now much safer than it was a few decades ago and produces no greenhouse gases. Besides, nuclear fuel can be recycled and the resources are relatively abundant.

Non-geological factors known to the writer that might affect the future activity of the Company in the area are the environmental concerns regarding the Selecky potok Memorabilia, private landowners and local environmentalist groups. It is the Company's responsibility to ensure that exploration works will not pose any harm to vegetation within the Memorabilia area. As well, the Company should meet with the local communities to discuss their plans and initiatives in the area to prevent unfounded environmental concerns.

## **19. RECOMMENDATIONS**

The Kalnica – Selec project is of sufficient merit for further exploration not only because substantial remaining resources exist within the historic, test mined blocks, but also because there is an excellent potential for additional resources in the areas outside the historic estimate blocks. Therefore, the writer recommends further exploring of the license area including 4,000 meters of core drilling to confirm and expand on the mineralization identified in the Kalnica, Selec and Krajna Dolina zones by previous

## Technical Report for Preliminary Assessment of the Kalnica - Selec Project

exploration. Chemical analyses of the anomalous intervals would be conducted to compare with the down-hole logs.

Ground radiometric surveys, geological mapping and litho-geochemical sampling are recommended to continue over the central portion of the license area. Furthermore, application for an additional exploration license covering areas immediately south-west and south of the existing license is recommended, based on the presence of uranium mineralization in several drill holes to the south of existing license and the presence of a radioactive anomaly in the southwest portion of the license area found during the Company's 2006 ground geophysical program.

### PROPOSED BUDGET:

#### Personnel:

Project Geologist: 90 days @ \$600	\$ 54,000
Geologist: 90 days @ \$500	45,000
2 Field Assistants: 150 days @ \$250	37,500
Diamond Drilling: 4,000 meters @ \$150 (all in)	600,000
Contract Geophysics: \$1,000/day	45,000
Mechanical Trenching/Road Building	30,000
Assays: 1,000 @ \$30	30,000
Meals/Accommodation: 330 man-days @ \$100	33,000
Truck Rental/Fuel	20,000
Travel/Freight Shipping	10,000
Field Supplies/Rentals/Communication	10,000
Data Compilation/Report	30,000
Sub-Total:	\$ 944,500
10% Contingency:	94,450
<b>Total:</b>	<b>\$1,038,950</b>

### 20. REFERENCES

Archangel'ski, S. A , Daniel J., 1981: Správa o výsledkoch výskumov PB izotopných vzťahov a podložia sprievodných prvkov v uránonosných permských sedimentoch (in Slovak); (A report on the results of research into isotope relationships and the accompanying elements in the uranium-bearing Permian sediments).

Balaz P (Ed.), 2004: Slovak Minerals Yearbook 2004; Statistical Data to 2003; Spisska Nova Ves – Bratislava.

Daniel J. et al.: Revízne a ukončujúce práce na rádioaktívne suroviny – projekt 1992, archív Uranpres, s.r.o. Spišská Nová Ves (in Slovak). (Checking-up and concluding works on the radioactive materials – project; Uranpres, s.r.o. Spisska Nova Ves, 1992).

Technical Report for Preliminary Assessment of the Kalnica - Selec Project

Harper, G. 2005: Report on Saddle Hill area uranium prospects, Exploration Licenses 3367X, 4846X, 4969X, 4970X, 4974X, 6995X, 7023X, 7405X, 7685X and 9283X, Dornod Aimag, eastern Mongolia.

Jančok J. a kol., 1979: Správa o prognóznom ocenení na rádioaktívne suroviny. Oblast': Považský Inovec. (573), 108 s (in Slovak). (A report on prognostic assessment of radioactive materials. Region: Považsky Inovec).

Janotka V., Lánč J a Nosko V. in: Hanas P. 1986: Považsky Inovec – sever – geofyzikálny prieskum, I podetapa; záverečné spracovanie (in Slovak). (Považsky Inovec – north – geophysical surveys; sub-stage I, final interpretation).

Grecula, P., Lexa J. and Tozser J. 1997: Mineral resources of Slovakia; Ministry of the Environment of the Slovak Republic and Geological Survey of Slovak Republic.

Hejl, V. 1976, in: Štimmel I. et al., 1984: Záverečná správa o geologicko-prieskumných prácach v oblasti Považského Inovca (1965 – 1983); ČSUP, koncern Příbram, závod IX., Spišská Nová Ves; Archív Uranpres Spišská Nová Ves (in Slovak). (Final report on geological exploration in the Považsky Inovec region (1965-1983); CSUP. Concern Příbram, plant IX, Spišska Nova Ves).

Kamenický J. in: Komon J., 2006: Geological exploration for U ores at Považsky Inovec, between Kalnica and Selec; Technical report for 2006)

Kantor J. 1959: Niekoľko poznámok k uranovému zrudneniu v permie severogemeridnej synklinály. (A few remarks on the uranium mineralization in the Permian of the North-gemeric syncline). Acta geol. geogr. Univ. Comen. Bratislava, 2, 157-166.

Killeen P. G. 1979: Gamma ray spectrometric methods in uranium exploration - application and interpretation. Geol. Surv. of Canada, Econ. Geol. Rep. 31.

Komon J 2005a: Geological Project "Exploration for U mineralization at Kalnica – Selec, Považský Inovec Mts., Slovakia".

Komon J 2005b: Geologický prieskum na U rudy na lokalite Považský Inovec medzi Kalnicou a Selcom; Technická správa pre Ministerstvo životného prostredia Slovenskej republiky za r. 2005, Koral, s.r.o. (in Slovak); (Geological exploration for U ores in Považsky Inovec, between Kalnica and Selec; Technical report for the Ministry of the Environment of the Slovak Republic 2005).

Komon J 2006: Geologický prieskum na U rudy na lokalite Považský Inovec medzi Kalnicou a Selcom; Technická správa za r. 2006, Koral, s.r.o. (in Slovak); (Geological exploration for U ores in Považsky Inovec, between Kalnica and Selec; Technical report for the Ministry of the Environment of the Slovak Republic 2006).

Melnikova A. M. 1974: Kratkaja charakteristika mineral'nogo sostava uranovykh rudoprojavenij v permskich otloženijach Považského Inovca i Gočaltovo. (327), 47 s. (In Russian). (Brief characteristics of mineral composition of the uranium mineralization in Permian strata of the Povazsky Inovec and Gocaltovo).

Mihál' F. – Felber E., 1973: Závěrečná správa z geologického mapovania. Lokalita: Považský Inovec – severná časť. (501), 52 s. (in Slovak). (Final report on geological mapping. Location: Povazsky Inovec -north part).

Ministry of the Environment of the Slovak Republic, Section of Geology and Natural Resources 2005: Decision on Granting the "Kalnica – Selec – U Ores" license, June 28, 2005.

Novotný L. – Steiner A., 1978: Projekt výskumných prác ložiska Novoveská Huta v severogemeridnom perme a ložiska Kalnica v perme Považského Inovca, do roku 1981. (437), 25 s (in Slovak). (Project of research works at Novoveska Huta deposit in north-gemic Permian and at Kalnica deposit in the Permian rocks of the Povzsky Inovec, to 1981).

Parma Z. – Černý P., 1976: Mineralogicko-petrografické zhodnocení technologického vzorku z Považského Inovce. (053/76) (in Czech).(Mineralogical-petrographic assessment of a technological sample from Povazsky Inovec).

Pelham D., White G., Bennett J. and Balakrishnan R. 2006: Technical report for Preliminary Assessment of the Jahodna Uranium Project, Slovakia. (for Tournigan Gold Corp.)

Plasienka D. 1976: Geologické pomery obalovej série severnej casti Považského Inovca, diplomová práca, PF UK, Bratislava (in Slovak); (Geological setting of the envelope series in the north part of the Povazsky Inovec; a thesis).

Polanský M. a kol. 1978: Výskum technologických vlastností rud malých lokalít a odvalu (in Czech) (A research into technological properties of the ores at small localities and in dumps).

Rojkovič I., 1980a: Geochemical characteristics of mineralized Permian rocks of the Považsky Inovec Mts. Geol. Zbor. Geol. Carpath. Bratislava, 31, 125-137.

Rojkovič I., 1980b: Mineralogical characterization of uranium mineralization in the Permian of the Považsky Inovec Mts. In: Permian of the West Carpathians, Bratislava, GUDS, 31, 137-146.

Rojkovič I., 1997: Uranium Mineralization in Slovakia; Monographic Series; Comenius University, Bratislava, pp. 1-117.

Sobolev V. M. 1979: Lito-stratigrafičeskije osobennosti razreza permi Považského Inovca(514),34 s. (in Russian). (Litho-stratigraphic features of the Permian section through Povazsky Inovec).

Štimmel I. et al., 1984: Závěrečná správa o geologicko-prieskumných prácach v oblasti Považského Inovca (1965 – 1983); ČSUP, koncern Pribram, závod IX., Spišská Nová Ves; Archív Uranpres Spišská Nová Ves (in Slovak). (Final report on geological exploration in the Povazsky Inovec region (1965-1983); CSUP. Concern Pribram, plant IX, Spisska Nova Ves).

Tulis J. and Novotny, L., 1996: Zaverena sprava: Ocenenie vyskytov molybdenovych rud a sprievodnych prvkov v severogemerickom perme. Uranpres, Spisska Nova Ves. (In Slovak) (Final report: Assessment of the ore occurrences with molybdenum and accompanying elements in the North-gemic Permian).

Zoubek V., 1936: Poznámky o krystaliniku Západných Karpat, Vest. st. geol. úst. Cs. republiky, 12, ss. 207-239 (in Czech); (Notes on the crystalline rocks of the West Carpathians).

Žukova V.I., 1979: Mineralogičeskaja charakteristika rud učastka Kalnica. (506), 23s. (in Russian).(Mineralogical characteristics of the ores of the Kalnica ore district).

## 21. CERTIFICATE OF QUALIFICATIONS

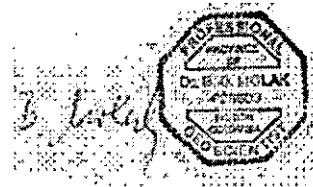
I, Bohumil (Boris) Molak, Ph.D., P.Geo., do hereby certify that:

1. I am a Professional Geoscientist residing at 102-8640 Shaughnessy Street, Vancouver, BC, V6P 3Y4, Canada.
2. I am a member of the Association of Professional Engineers and Geoscientists of British Columbia (License No.28600) in good standing.
3. I graduated from the Comenius University, Czechoslovakia, with a Bachelor of Science (Mgr.) in Economic Geology in 1970. From the same university I obtained in 1980 the degree Master of Science in Economic Geology (RNDr.) and in 1990 the degree Doctor of Philosophy (CSc.). I have practiced my profession continuously since 1970.
4. Since 1970 I worked for the Government, on contracts or as a self-employed consulting geologist on many geological research projects and in exploration for precious and base metals, uranium, molybdenum, tungsten, industrial minerals and hydrocarbons in Slovakia, Zambia, Cuba, Guinea, Canada, Chile and Argentina.
5. I took part in the data compilation and conducted radiometric surveys, mapping and sampling on the Kalnica-Selec Project in October 2005 and September/October 2006.



Technical Report for Preliminary Assessment of the Kalnica - Selec Project

6. I am the Qualified Person for the purposes of National Instrument 43-101 and am responsible for all sections of this report. The sources of all information not based on personal examination are quoted in the report. The information provided by other parties is to the best of my knowledge and experience correct.
7. As of the date of this Certificate I am not aware of any material fact or material change with respect to the subject matter of this report that is not reflected in this report, the omission of which would make this report misleading.
8. I am independent of Ultra Uranium Corp. in accordance with the application of Section 1.5 of National Instrument 43-101.
9. I have read National Instrument 43-101, Standards of Disclosure for Mineral Projects and Form 43-101F1, Technical Reports and this report has been prepared in compliance with NI 43-101 and Form 43-101F1 and in conformity with generally accepted Canadian mining industry practice.



Dated at Vancouver, BC, Canada, this 13<sup>th</sup> day of February, 2007.  
(Amended February 16, 2007)

# APPENDIX I

## Summary of Diamond Drilling Data

D.H. #	Y_JTSK	X_JTSK	Z	Depth	Depth of down-hole survey	Date of final down-hole Survey	Result	Depth of Xmax [m]	Xmax [pA/kg]	Width/%U*	Location
332	506404.06	1,223,361.60	420.67	327.1	286.0	2/18/1966	N				H
333	506337.27	1,223,591.72	378.85	284.6	281.0	3/29/1966	N				H
338	506233.06	1,223,847.47	350.60	295.9	292.8	5/18/1966	N				H
718	504225.82	1,219,922.20	420.16	313.0	311.8	6/3/1975	N				K
719	504274.92	1,219,891.60	415.97	317.8	316.4	7/2/1975	N				K
720	504244.53	1,220,299.04	333.63	318.0	317.5	6/10/1975	N				K
721	504383.68	1,220,185.24	323.29	237.5	237.5	7/3/1975		36.4	5.2		K
722	504333.64	1,220,217.00	326.36	253.8	252.9	8/13/1975	N				K
723	503691.99	1,219,076.28	452.38	252.3	244.3	8/12/1975		122.1	2.9		K
724	503996.10	1,219,722.59	431.67	324.5	323.0	9/23/1975	N				K
725	504330.52	1,220,016.71	388.44	312.0	312.8	9/24/1975		244.4	7.7		K
729	504451.70	1,219,923.88	349.04	324.1	322.3	0/28/1975		73.1	19.3	11.3/0.023	K
730	503815.08	1,219,652.80	402.63	333.8	332.3	0/29/1975	N				K
731	504509.32	1,220,306.24	366.40	304.8	302.8	1/29/1975	N				K
732	504388.85	1,220,027.67	372.30	265.3	264.5	1/28/1975		52.9	11.5	1.6/0.015	K
733	504508.51	1,221,393.06	352.20	303.0	301.4	1/15/1976	N				K
734	504967.42	1,221,305.18	334.60	311.3	307.4	2/24/1976	N				K
735	501748.66	1,213,898.53	266.61	319.8	317.0	1/14/1976		81.4	17.6	1.5/0.025	S
736	501873.34	1,214,237.93	266.84	335.0	331.0	2/24/1976		110.9	10.1	0.6/0.01+	S
737	502039.45	1,214,253.02	275.44	335.2	335.0	4/2/1976		98.5	12.9	1.4/0.01+	S
741	505242.76	1,221,180.37	319.36	279.0	278.9	4/8/1976		52.2	20.6	3.2/0.023	K
742	504145.24	1,219,513.59	386.78	300.1	295.2	7/15/1976		54.3	14.3		K
743	501577.39	1,214,253.63	277.08	313.0	311.2	5/6/1976	N				S
744	502103.51	1,213,480.91	278.28	316.2	316.2	6/21/1976		11.7	30.2	3.3/0.032	S
745	503892.25	1,219,185.85	405.60	311.4	307.5	1/23/1976	N				K
746	503819.23	1,219,296.15	445.08	274.9	267.6	10/5/1976		78.8	30.0	6.2/0.02	K
797*	504388.59	1,219,782.64	370.25	87		1977					K
798	504312.33	1,219,706.87	372.44	305.0	301.3	9/29/1977		29.5	9.7		K
799	504403.30	1,219,763.73	371.79	315.3	312.6	9/5/1977		288.9	98.2	2.8/0.058	K
800	504487.11	1,219,833.44	341.69	243.1	240.7	1/16/1977		119.7	5.7		K
801	504561.15	1,219,865.16	322.42	247.2	239.6	7/14/1977		228.8	18.3		K
802	504231.49	1,219,477.07	361.51	314.0	311.9	0/26/1977	N				K
803	503538.49	1,219,386.20	482.02	279.4	273.2	8/24/1977	N				K
804	503871.54	1,218,890.10	443.98	302.5	301.2	12/8/1977	N				K
805	504462.46	1,218,473.40	424.20	260.0	257.8	12/9/1977	N				K
806	503339.09	1,218,848.02	464.09	280.6	279.7	1/16/1977	N				K

Technical Report for Preliminary Assessment of the Kalnica - Selec Project

807	503696.07	1,219,440.96	448.72	302.0	300.4	11/8/1977	N				K
808	504520.33	1,219,942.03	340.29	304.3	303.1	1/6/1977		60.5	186.3	8.2/0.072	K
809	504620.16	1,219,776.83	319.31	302.0	301.3	5/27/1977		163.6	42.3	1.3/0.034	K
810	503388.96	1,218,665.77	437.76	308.0	305.3	9/30/1977	N				K
811	505612.81	1,219,009.57	250.65	659.2	651.5	0/16/1978	N				K
812	503559.91	1,218,309.87	395.73	302.0	298.6	12/9/1977	N				K
813	504591.23	1,217,507.18	302.26	315.0	310.0	9/4/1978	N				K
814	504265.98	1,217,643.70	315.50	315.0	306.4	8/8/1978	N				K
815	503954.23	1,217,671.66	329.83	305.0	300.8	7/11/1978	N				K
816	503785.61	1,217,821.53	341.65	303.5	299.9	6/7/1978	N				K
817	500883.61	1,213,358.12	277.15	295.2	282.0	8/23/1978	N				S
818	501465.83	1,213,245.09	261.41	302.0	298.5	9/6/1978	N				S
819	501209.75	1,213,300.55	298.35	315.3	311.2	6/21/1978		297.5	25.2	1.1/0.03	S
820	501723.27	1,213,144.12	254.19	311.8	300.8	10/4/1978		206.5	8.1		S
821	502177.15	1,213,658.27	293.20	330.0	325.3	2/15/1977		315.1	16.5	1.9/0.0217	S
822	502250.96	1,213,760.23	300.01	231.4	231.1	4/15/1977		106.4	10.3		S
823	501915.54	1,213,889.54	309.79	372.2	368.3	8/15/1980		326.5	29.1	2.6/0.03	S
824	502051.89	1,213,885.21	327.41	292.0	291.6	7/4/1980		76.4	8.2		S
825	502187.03	1,214,294.94	281.98	307.5	292.9	2/15/1976	N				S
826	502231.51	1,214,648.12	304.31	317.1	316.2	1/21/1977		163.1	8.4		S
827	502344.12	1,214,716.94	318.80	278.9	276.8	5/18/1977	N				S
828	502495.23	1,214,733.27	354.55	306.7	305.2	4/6/1977	N				S
829	504638.73	1,219,601.12	345.22	650.7	647.3	10/6/1978	N				K
830	501587.80	1,213,939.59	261.16	294.2	293.4	7/6/1978		101.1	13.3	1.6/0.0144	S
831	502068.49	1,214,628.13	296.45	380.2	379.3	2/25/1977	N				S
852	501885.65	1,213,148.77	307.77	285.6	285.6	1/11/1978		137.1	121.1	1/0.108	S
853	503030.98	1,217,453.83	434.73	298.1	298.0	9/26/1978	N				S
854	503187.41	1,217,166.41	453.91	297.5	297.4	0/20/1978	N				S
855	503271.88	1,216,901.00	469.46	238.2	230.1	1/13/1978	N				S
856	502270.94	1,213,332.48	331.22	506.2	502.9	2/28/1982		280.4	30.8	3.1/0.0285	S
871	504418.40	1,219,831.96	364.01	668.3	661.0	1/3/1980		127.6	171.3	4.2/0.113	K
872	504279.16	1,219,745.99	391.24	309.3	308.8	10/9/1978		81.5	20.1	0.9/0.02+	K
873	504349.85	1,219,820.04	393.07	314.0	302.1	11/7/1978		16.8	21.2	3.1/0.022	K
874	505254.66	1,212,936.24	218.95	170.0	167.4	4/7/1981	N				S
875	502323.49	1,215,179.38	297.63	515.3	510.8	2/21/1980	N				S
876	502575.52	1,215,155.85	322.01	312.4	310.0	3/3/1980	N				S
877	502925.68	1,215,193.55	366.19	300.0	291.4	1/22/1980	N				S
878	503297.14	1,215,095.66	448.58	303.0	297.8	12/8/1979	N				S
879	502477.31	1,215,936.83	311.84	496.3	495.1	1/7/1980	N				S
880	502836.88	1,216,036.34	387.86	309.5	304.1	0/23/1979	N				S
881	503103.24	1,216,024.48	418.20	509.1	506.5	1/12/1979	N				S
882	501965.87	1,213,452.65	267.10	321.0	318.6	9/16/1980		35.1	45.7	8.5/0.04	S
883	505289.88	1,220,447.73	369.05	670.5	660.6	3/28/1983		505.5	89.0	4.3/0.064	K
884	503752.35	1,220,002.44	473.39	622.5	495.5	10/4/1979	N				K
885	504717.15	1,220,585.09	430.83	298.9	289.0	5/14/1979	N				K

# Technical Report for Preliminary Assessment of the Kalnica - Selec Project

886	504717.15	1,220,196.02	331.43	301.0	300.6	3/16/1979	N					K
887	504741.63	1,220,080.02	353.96	334.4	333.3	4/2/1979	N					K
888	504425.56	1,220,393.79	393.54	306.0	303.6	5/15/1979	N					K
889	504425.56	1,220,714.04	449.51	500.6	499.5	7/5/1979	N					K
890	504859.12	1,220,714.04	401.04	303.6	300.7	4/6/1979	N					K
909	505389.32	1,220,734.61	311.24	550.0	549.9	9/4/1979		488.4	139.9	9.4/0.05		K
910	504889.74	1,220,885.61	386.57	277.6	269.7	6/18/1979		125.0	12.8	3.6/0.01+		K
911	505075.18	1,220,736.67	376.85	300.0	289.6	8/10/1979		233.6	19.7	1/0.021		K
912	505227.05	1,220,545.27	356.42	317.0	310.8	9/18/1979		305.2	7.5			K
913	501266.27	1,214,020.13	313.46	471.2	469.4	5/4/1980	N					S
914	501417.44	1,213,978.70	285.50	317.1	313.6	4/14/1980	N					S
915	502086.17	1,213,137.76	345.25	308.8	304.1	1/28/1980		188.1	19.5	2.1/0.022		S
916	502295.10	1,213,122.50	363.33	512.5	509.7	7/14/1981		369.4	10.4	0.7/0.01+		S
917	502517.16	1,213,091.55	390.03	610.6	574.8	9/3/1980	N					S
918	500661.79	1,212,997.01	284.45	554.8	286.0	6/2/1980	N					S
919	500931.44	1,212,969.99	294.13	496.6	488.2	7/1/1980	N					S
920	501429.96	1,212,768.85	225.76	303.2	298.8	5/14/1980	N					S
939	501788.11	1,212,743.48	253.22	597.5	577.3	3/22/1980	N					S
940	502192.38	1,212,680.60	331.60	543.3	535.9	9/18/1980		434.0	7.8			S
941	502624.59	1,212,616.25	307.91	640.0	630.7	3/18/1981		491.1	5.7			S
942	501048.13	1,212,359.33	284.50	408.6	404.6	8/1/1980	N					S
943	501365.54	1,212,289.90	255.86	295.0	279.6	12/4/1980	N					S
944	501691.34	1,212,313.33	235.53	331.6	327.3	1/17/1980		145.1	14.5	0.7/0.02		S
945	502207.21	1,212,325.42	327.50	479.5	476.5	0/22/1980	N					S
946	505142.16	1,220,616.29	366.76	540.0	538.7	1/6/1983		335.5	126.0	1/0.06		K
947	505298.07	1,221,017.40	312.10	662.5	655.2	3/13/1983		382.8	58.0	2.6/0.051		K
948	505425.93	1,221,379.82	381.96	626.0	625.7	5/7/1983		546.5	7.6			K
949	505194.93	1,221,478.24	393.37	327.9	324.8	6/1/1983	N					K
950	505103.59	1,221,718.30	389.59	513.6	512.3	5/7/1983		56.2	4.0			K
951	501587.32	1,212,766.01	245.82	309.6	307.1	1/13/1982		63.4	6.8			S
952	501614.23	1,212,944.81	243.59	327.6	327.3	2/3/1982		94.8	49.5	1/0.0436		S
955	502299.64	1,213,467.18	336.10	486.4	481.3	7/1/1982		469.9	422.0	0.7/0.143		S
961	501275.61	1,213,722.43	293.98	297.0	292.3	2/18/1981		55.2	21.9	5.8/0.0161		S
962	501508.28	1,213,712.12	257.26	326.3	319.0	1/28/1981		174.9	13.7	1.6/0.01+		S
963	501726.09	1,213,741.43	262.42	303.0	300.0	7/13/1981		13.1	21.6	1/0.022		S
964	501955.14	1,213,659.80	311.74	312.4	308.8	8/14/1981		86.4	13.8	0.8/0.01+		S
965	502405.36	1,213,757.99	324.80	633.6	628.1	1/19/1981		223.5	24.0	6.0/0.015+		S
966	501227.13	1,213,506.32	295.99	500.5	500.4	5/10/1981		146.6	27.8	4.6/0.025		S
967	501496.32	1,213,453.21	253.42	566.0	561.1	1/21/1981		78.5	44.1	1.7/0.032		S
968	501778.79	1,213,434.52	257.83	326.3	322.2	1/6/1981	N					S
969	501550.93	1,213,446.58	245.79	497.3	489.6	3/10/1982		212.3	18.2	0.9/0.02		S
970	501298.69	1,213,124.71	280.41	500.3	490.1	6/18/1981		158.9	12.2	0.7/0.01+		S
971	501124.76	1,211,974.48	260.30	655.0	653.1	3/25/1982	N					S
972	501449.10	1,211,966.96	257.63	298.0	291.1	2/10/1982	N					S
973	501669.59	1,211,961.50	231.61	556.0	555.7	3/12/1981		395.2	5.7			S

# Technical Report for Preliminary Assessment of the Kalnica - Selec Project

974	502141.15	1,211,864.25	273.61	581.6	551.0	6/2/1981	N				S
975	501256.58	1,212,968.47	258.64	380.7	333.44	4/28/1982		40.8	3.5		S
976	501675.63	1,211,165.95	224.90	555.0	273.26	19/19/1981	N				S
977	501966.49	1,210,919.58	259.66	643.5	640.39	16/19/1981	N				S
978	501849.62	1,212,960.64	282.91	338.7	337.2	11/7/1981		215.8	11.0	1.2/0.01+	S
979	501932.80	1,213,258.03	308.32	312.8	296.9	0/19/1981		169.1	64.5	5.9/0.0527	S
980	501684.75	1,213,271.52	252.12	330.0	326.6	1/11/1981		245.2	75.0	1.5/0.061	S
1024	502433.31	1,213,498.71	354.48	650.7	645.0	2/21/1982		592.1	73.0	0.8/0.055	S
1025	503412.27	1,212,549.57	286.70	645.5	641.09	9/30/1982		204.2	15.8		S
1026	502685.74	1,214,449.03	383.36	502.9	500.98	8/23/1982		486.5	21.8	1.3/0.02	S
1027	503180.66	1,214,466.77	453.81	668.2	657.96	6/21/1982		545.5	6.0		S
1028	505253.55	1,221,963.13	468.63	506.1	501.37	7/18/1983		177.8	12.2	1.4/0.01+	K
1029	504541.68	1,219,895.75	325.44	157.0	150.0	3/4/1982		52.9	18.8	3.7/0.017	K
1030	504493.90	1,219,975.14	336.55	127.8	124.23	12/19/1982		66.7	41.6	3.4/0.0356	K
1031	504428.32	1,220,018.82	357.76	237.8	233.4	4/6/1982		31.9	10.0	0.4/0.01+	K
1032	504477.44	1,219,879.06	341.35	170.8	168.32	2/24/1982		96.3	5.4		K
1033	504446.56	1,219,944.32	357.20	169.8	167.33	3/24/1982		57.0	61.5	1.9/0.044	K
1034	504430.31	1,219,914.72	364.44	192.3	191.67	7/26/1982		68.1	102.5	1.5/0.087	K
1035	504455.60	1,219,862.89	353.58	166.5	162.02	12/19/1982		104.2	29.4	1.1/0.025	K
1036	504401.81	1,220,005.16	372.30	203.4	202.4	5/6/1982		69.1	124.0	12.5/0.04	K
1037	504379.91	1,219,982.76	387.54	220.0	213.1	5/25/1982		76.6	16.0	0.6/0.01+	K
1037/1	504379.91	1,219,982.76	387.54	220.0	213.1	6/2/1982	N				K
1038	504477.28	1,219,788.48	352.53	207.2	202.31	1/21/1982		141.6	16.0	0.6/0.015	K
1039	504397.20	1,219,861.36	378.72	234.7	233.46	6/22/1982		100.4	214.0	13/0.042	K
1040	504354.32	1,219,902.05	404.73	278.0	276.57	7/14/1982		75.1	23.8	2.6/0.01	K
1047	502121.78	1,213,011.39	357.85	504.3	502.3	11/7/1982	N				S
1048	501497.97	1,212,918.30	253.02	320.0	313.7	12/1/1981		162.0	31.8	1.4/0.032	S
1049	505112.87	1,222,075.27	450.78	358.1	355.95	5/31/1983	N				K
1080	504970.30	1,222,067.57	455.50	342.0	336.96	6/20/1983	N				K
1081	505371.64	1,222,318.13	523.47	631.0	628.4	1/10/1983		244.2	6.3		K
1084	505919.78	1,223,983.75	319.76	506.0	501.9	9/9/1983	N				K
1085	505746.56	1,223,554.61	338.66	302.0	298.18	8/24/1983		215.0	49.2	8.9/0.032	K
1086	505520.97	1,223,510.91	347.87	325.1	318.57	7/19/1983	N				K
1087	506985.17	1,224,104.59	265.84	568.6	562.6	10/7/1983	N				K
1088	506530.19	1,224,196.69	273.08	335.0	335.09	9/28/1983		283.5	8.4		K
1089	506341.87	1,224,379.17	275.79	311.0	306.6	0/25/1983		86.0	20.4	2.7/0.02	K
1106	505193.20	1,222,457.07	521.71	512.0	509.78	8/17/1983	N				K
1107	505143.55	1,222,510.14	522.12	305.2	302.19	11/19/1983	N				K
1108	505063.76	1,222,362.31	499.44	175.2	170.59	9/29/1983	N				K
1109	505082.73	1,222,498.75	528.69	201.0	199.5	0/13/1983	N				K
1110	505089.07	1,222,644.77	525.71	217.0	206.1	0/30/1983	N	64.5	3.4		K

H – Horka nad Vahom; K – Kalnica; S – Selec; N-negative; bold black – 10 – 17 pA.kg<sup>-1</sup>; blue – 18-27 pA.kg<sup>-1</sup>; green – 27 – 45 pA.kg<sup>-1</sup>; magenta – 46 – 63 pA.kg<sup>-1</sup>; pink – 64 – 81 pA.kg<sup>-1</sup>; red > 81 pA.kg<sup>-1</sup>; † hole lost, non-surveyed; \* apparent width and average uranium content of causative bed (in %); 0.01+ - more than 0.01 % U.

## APPENDIX II

### Highlights of Uranium Mineralization in Diamond Drill Holes

Kalnica Zone					U content ranges (in %)				
D.H. #	From – To (m)	Range % U	Ave % U	Width*	0.01-0.02	0.021-0.03	0.031-0.05	0.051-0.07	>0.07
729	298.9-294.7	0.01-0.031	0.024	3.9		3.9			
349m	279-267.7	0.01-0.03	0.023	11.3		11.3			
	264.5-258	0.01-0.032	0.02	6.1	6.1				
	253.2-252	0.01+		1.2	1.2				
	139.7-137.5	0.01±		2.2	2.2				
732	320.6-319	0.015±		1.6	1.6				
372.3m	265.6-265	0.01±		0.6	0.6				
742	348.4-347.2	0.011-0.014	0.0125	1.3	1.3				
386.8m	336.5-336.4	0.01	0.01	0.2	0.2				
	333.4-330.6	0.01-0.018	0.014	2.9	2.9				
746	373.0-366.9	0.01-0.029	0.018	6.2	6.2				
445.1m	365.7-363.3	0.01-0.027	0.0133	2.5	2.5				
799	84.5-81.4	0.01-0.12	0.058	2.8				2.8	
371.8m									
801	95.1-93.3	0.007-0.034	0.014	1.8	1.8				
322.4m									
808	304.2-298.0	0.01-0.07	0.039	6			6		
340.3m	292.1-289.6	0.01-0.08	0.035	2.5			2.5		
	286.3-274.8	0.01-0.38	0.072	8.2					8.2
	286.3-274.8	0.01-0.38	0.12	4.0					
	260.9-256.7	0.01-0.034	0.0181	4.3	4.3				
	255.1-249.5	0.01-0.03	0.0167	5.7	5.7				
809	157.6-156.0	0.01-0.09	0.034	1.3			1.3		
319.3m									
871	268.0-254.8	0.01-0.21	0.031	13.2		13.2			
364m	268.0-254.0	0.01-0.21	0.081	2					
	240.9-240.8	0.016-0.032		0.2	0.2				
	239.1-231.3	0.01-0.262	0.0663	7.9				7.9	
	239.1-231.3	0.01-0.26	0.113	4.2					
	84.6-83.1	0.01-0.028		1.6	1.6				
872	314.7-314.2	0.013-0.026		0.6	0.6				
391.2m	310.1-289.0	0.011-0.035		0.9	0.9				
	289.9-289.0	0.01-0.03		1	1				
873	380.0-375.4	0.01-0.039	0.022	3.1		3.1			
393.1m	317.4-315.0	0.01+		2.4	2.4				
	313.2-311.4	0.01-0.02		2.4	2.4				
	309.4-306.0	0.01±		3.5	3.5				
1029	274.4-270.9	0.013-0.03	0.017	3.7	3.7				

Technical Report for Preliminary Assessment of the Kalnica - Selec Project

325.4m								
1030	290.9-290.0	0.01-0.031	0.019	1	1			
336.6m	289.3-287.5	0.01-0.022		1.9	1.9			
	280.5-277.0	0.01-0.039	0.025	2.7		2.7		
	275.5-269.3	0.011-0.031	0.028	6.3		6.3		
	275.5-269.3	0.011-0.031	0.0356	3.4				
1031	335.4-333.4	0.01-0.014		2	2			
357.8m	326.0-325.6	0.01-0.014		0.4	0.4			
1033	328.1-327.1	0.01-0.014		1	1			
357.2m	327.0-324.0	0.016-0.031	0.024	3.1		3.1		
	322.6-321.9	0.018-0.032		0.7	0.7			
	311.0-307.7	0.011-0.029	0.0175	3.4	3.4			
	304.3-299.1	0.01-0.082	0.044	1.9			1.9	
1034	296.8-295.3	0.028-0.13	0.087	1.5				1.5
364.4m	292.5-290.6	0.01-0.028		1.9	1.9			
	283.0-278.6	0.01-0.023	0.0116	4.5	4.5			
	205.4-205.2	0.01-0.02		0.3	0.3			
1035	326.8-324.8	0.01±		2	2			
353.6m	249.9-248.9	0.01-0.044	0.025	1.1		1.1		
1036	342.9-342.3	0.01±		0.7	0.7			
372.3m	303.4-291.2	0.005-0.208	0.04	12.3			12.3	
	303.4-301.8	0.02-0.21	0.085	1.7				
	289.0-282.8	0.01-0.061	0.026	1.8		1.8		
	269.8-268.0	0.01-0.17	0.05	1.9			1.9	
1037	340.0-339.4	0.01-0.013		0.7	0.7			
387.5m	337.8-337.3	0.01-0.011		0.6	0.6			
	335.6-334.6	0.01+		1.1	1.1			
	330.7-330.3	0.01-0.02		0.5	0.5			
	310.0-309.5	0.01-0.018		0.6	0.6			
1038	211.4-210.9	0.013-0.022		0.6	0.6			
352.5m	210.3-210.1	0.011-0.014		0.3	0.3			
	206.2-205.8	0.011-0.019		0.5	0.5			
1039	312.7-311.8	0.01-0.024		1	1			
378.7m	310.8-304.8	0.01-0.057	0.032	5.7			5.7	
	303.9-301.2	0.01-0.038	0.028	2.3		2.3		
	299.1-297.7	0.012-0.048	0.028	1.5		1.5		
	297.2-294.9	0.011-0.141	0.059	2.2				2.2
	290.5-271.7	0.01-0.31	0.042	13			13	
1040	333.0-332.8	0.01		0.3	0.3			
404.7m	331.8-328.6	0.01±		1.3	1.3			
	326.9-325.7	0.01±		1.3	1.3			

Technical Report for Preliminary Assessment of the Kalnica - Selec Project

Krajna Dolina Zone					U content ranges (in %)				
D.H. #	From – To (m)	Range % U	Ave % U	Width*	0.01-0.02	0.021-0.03	0.031-0.05	0.051-0.07	>0.07
741	268.7-260.3	0.01-0.03	0.023	3.2		3.2			
319.4m									
883	173.0-172.7	0.01-0.044	0.0195	0.4	0.4				
369.0m	(-)125.1-126.2	0.01-0.019		1.2	1.2				
	(-)127.9-128.4	0.01+		0.6	0.6				
	(-)129.2-137.0	0.01-0.12	0.0413	7.9			7.9		
	(-)131.4-135.3	0.01-0.12	0.067	4.0					
909	(-)158.8-181.2	0.01-0.21	0.035	20.3			20.3		
311.2m	(-)158.8-181.2	0.01-0.21	0.051	9.4					
910	197.5-194.0	0.01-0.027		3.6	3.6				
386.6m									
911	160.0-157.0	0.01-0.024	0.02	1	1				
376.9m	155.0-154.5	0.01-0.026	0.011	10.6	10.6				
	155.0-154.5	0.01-0.026	0.0182	1.5					
	155.0-154.5	0.01-0.026	0.0153	1.7					
	144.6-142.1	0.01-0.031	0.021	1		1			
946	51.9-50.9	0.01-0.024		1.1	1.1				
366.8m	43.4-34.6	0.01-0.167	0.021	9		9			
	43.4-34.6	0.01-0.167	0.06	1					
	32.9-25.9		0.0286	7.2		7.2			
	32.9-25.9		0.05	1.7					
947	(-) 52.8-53.9	0.01-0.025		1.2	1.2				
312.1m	(-) 61.5-72.5	0.01-0.082	0.0277	11.2		11.2			
	(-) 61.5-72.5	0.01-0.082	0.051	2.6					
	(-) 96.4-99.4	0.01-0.038	0.026	1		1			
	(-) 100.1-100.6	0.011-0.036		0.6	0.6				
	(-) 101.1-105.9	0.01-0.052	0.028	2.4		2.4			
	(-) 108.3-109.3	0.01-0.024		1.1	1.1				
	(-) 147.6-150.0	0.01-0.052	0.042	0.5			0.5		
1028	291.4-290.0	0.01-0.017		1.4	1.4				
468.6m									
Selec Zone					U content ranges (in %)				
D.H. #	From – To (m)	Range % U	Ave % U	Width*	0.01-0.02	0.021-0.03	0.031-0.05	0.051-0.07	>0.07
735	186.4-183.7	0.01-0.032	0.025	1.5		1.5			
372.3m	30.1-28.7	0.01-0.018		1.4	1.4				
736	156.0-155.4	±0.01-0.02		0.6	0.6				
266.8m									
737	177.7-176.3	0.01-0.02		1.4	1.4				
275.4m									



Technical Report for Preliminary Assessment of the Kalnica - Selec Project

744	268.1-264.6	0.01-0.063	0.030	3.6		3.6			
278.3m	258.2-252.6	0.01-0.02	0.0133	5.8	5.8				
	258.2-252.6	0.01-0.02	0.018	1.2					
	258.2-252.6	0.01-0.02	0.015	2.0					
	247.0-244.3	0.01+		2.7	2.7				
	161.0-149.0	0.01-0.029	0.024	1.2		1.2			
	146.6-137.4	0.01-0.042	0.0265	2		2			
	146.6-137.4	0.01-0.042	0.031	1.4			1.4		
819	1.7-0.2	0.01-0.032	0.028	1.5		1.5			
288.4m	(-) 6.0-8.0	0.01-0.037	0.03	1.1		1.1			
	(-) 9.0-9.7	0.01±		0.8	0.8				
821	270.5-267.7	0.008-0.019	0.0122	2.9	2.9				
293.2m	270.5-267.7	0.008-0.019	0.0164	1					
	254.6-253.7	0.009-0.014	0.0118	1	1				
	252.3-250.4	0.008-0.012	0.01	2	2				
	220.6-217.7	0.008-0.02	0.0137	3	3				
	220.6-217.7	0.008-0.02	0.0173	1.2					
	7.1-6.3	0.011-0.017	0.0138	0.9	0.9				
	(-) 19.8-22.3	0.01-0.027	0.019	2.6	2.6				
	(-) 19.8-22.3	0.01-0.027	0.0217	1.9					
823	247.4-246.0	0.01-0.021		1.5	1.5				
303.8m	(-) 13.6-14.0	0.012-0.023		0.5	0.5				
	(-) 18.5-19.4	0.01-0.015		1	1				
	(-) 21.0-23.5	0.01-0.041	0.03	1.5		1.5			
830	168.2-168.1	0.01-0.012	0.011	0.2	0.2				
261.2m	162.4-162.3	0.01-0.013	0.012	0.2	0.2				
	161.4-159.9	0.012-0.02	0.0144	1.6	1.6				
	158.2-157.3	0.007-0.013	0.0104	1	1				
852	238.5-238.4	0.011-0.012	0.012	0.2	0.2				
307.8m	236.8-235.9	0.01-0.019	0.0147	1	1				
	234.0-233.8	0.013	0.013	0.3	0.3				
	233.1-218.8	0.007-0.033	0.016	14.5	14.5				
	233.1-218.8	0.007-0.033	0.024	3.4					
	212.3-209.9	0.007-0.021	0.0144	2.6	2.6				
	196.0-183.5	0.007-0.057	0.0234	12.7		12.7			
	196.0-183.5	0.007-0.057	0.03	7.8					
	182.9-175.8	0.007-0.082	0.021	7.2	7.2				
	182.9-175.8	0.007-0.082	0.06	1					
	173.1-165.1	0.001-0.239	0.026	8.1		8.1			
	173.7-165.3	0.001-0.239	0.108	1					
	161.5-160.1	0.008-0.034	0.017	1.5	1.5				
856	57.3-47.3	0.01-0.043	0.02	10.2	10.2				
331.2m	57.3-47.3	0.01-0.043	0.03	0.9		0.9			
	57.3-47.3	0.01-0.043	0.031	1.2			1.2		
	57.3-47.3	0.01-0.043	0.024	1		1			

Technical Report for Preliminary Assessment of the Kalnica - Selec Project

882	235.9-227.1	0.01-0.076	0.04	8.5			8.5		
267.1m	224.2-216.7	0.01-0.067	0.026	2.4		2.4			
	224.2-216.7	0.01-0.067	0.034	1			1		
	214.0-213.5	0.01+		0.6	0.6				
915	159.5-156.0	0.01-0.03	0.022	2.1		2.1			
345.3m									
916	(-) 4.0-4.6	0.01+		0.7	0.7				
363.3m									
944	90.9-90.3	0.013-0.023		0.7	0.7				
235.5m									
952	149.4-148.5	0.015-0.076	0.0436	1			1		
243.6m	97.1-94.4	0.01-0.052	0.03	2.8		2.8			
	89.1-89.0	0.01-0.011		0.2	0.2				
955	268.2-267.6	0.01-0.025		0.7	0.7				
336.1m	265.4-264.9	0.01-0.018		0.6	0.6				
	263.3-246.3	0.01-0.026	0.012	17.1	17.1				
	244.8-243.8	0.01-0.024		1.1	1.1				
	242.7-240.6	0.01-0.044	0.03	0.7		0.7			
	239.7-239.2	0.013-0.029		0.6	0.6				
	238.4-237.8	0.01-0.02		0.7	0.7				
	233.1-231.9	0.01-0.023		1.3	1.3				
	230.4-229.4	0.01-0.014		1.1	1.1				
	228.5-227.3	±0.01-0.023		1.3	1.3				
	226.4-225.1	0.01-0.021		1.4	1.4				
	224.2-223.3	0.01-0.02		1	1				
	222.2-221.3	0.01-0.02		1	1				
	210.6-210.1	0.01-0.022		0.6	0.6				
	163.7-162.1	0.015-0.16	0.066	1.7				1.7	
	153.1-150.6	0.01-0.059	0.03	2.6		2.6			
	149.8-149.2	0.01-0.014		0.7	0.7				
	141.3-126.7	0.01-0.164	0.0452	14.8			14.8		
	141.3-126.7	0.01-0.164	0.09	4.2					
	126.1-122.7	0.01-0.024		3.5	3.5				
	121.4-119.4	0.01-0.079	0.0326	2.1			2.1		
	117.5-114.9	0.01-0.034	0.017	2.7		2.7			
	52.7-51.3	0.01-0.018		1.5	1.5				
	49.5-48.4	0.01-0.024		1.2	1.2				
	33.4-31.9	0.01-0.021		1.5	1.5				
	24.2-20.2	0.01-0.058	0.03	4.2		4.2			
	3.6-2.9	0.01-0.032		0.8	0.8				
	(-) 29.6-35.9	0.01-0.084	0.044	6.4			6.4		
	(-) 29.5-35.9	0.01-0.084	0.05	4.4					
	(-) 132.4-133.0	0.01-0.476	0.143	0.7					0.7
	(-) 140.6-141.0	0.018-0.058	0.036	0.5			0.5		
961	245.3-244.7	0.014-0.017		0.7	0.7				

Technical Report for Preliminary Assessment of the Kalnica - Selec Project

294.0m	243.3-237.6	0.01-0.032	0.0161	5.8	5.8				
	234.8-233.6	±0.01-0.022		1.3	1.3				
	232.7-231.9	0.01-0.023		0.9	0.9				
962	244.2-243.7	0.01-0.012		0.6	0.6				
257.3m	82.8-81.3	0.01-0.018		1.6	1.6				
963	256.3-246.3	0.01-0.035	0.01	10.1	10.1				
262.4m	74.1-74.0	0.01		0.2	0.2				
964	262.3-260.7	0.01-0.015		1.7	1.7				
311.7m	225.8-225.1	0.01-0.018		0.8	0.8				
965	241.2-240.4	0.01-0.025	0.022	0.9		0.9			
324.8m	238.1-235.1	±0.01		3.1	3.1				
	233.7-233.3	0.01-0.014		0.5	0.5				
	103.9-101.4	0.01-0.029	0.0177	2.6	2.6				
	100.8-97.6	0.01-0.025	0.016	3.4	3.4				
	85.2-84.1	±0.01-0.015		1.2	1.2				
	82.2-81.7	0.01-0.02		0.6	0.6				
	51.3-51.1	0.013-0.018		0.3	0.3				
	46.8-44.8	0.01-0.015		2.1	2.1				
	(-) 54.1-55.9	0.01-0.035	0.0237	1.9		1.9			
	(-) 57.0-59.0	0.01-0.032	0.012	2.1	2.1				
	(-) 63.3-64.5	0.01-0.027	0.02	1.3	1.3				
966	150.2-145.7	0.01-0.047	0.025	4.6		4.6			
296.0m	150.2-145.7	0.01-0.047	0.035	2.3					
	144.2-140.7	0.01-0.031	0.016	3.7	3.7				
	138.3-136.1	0.01-0.031	0.019	2.4	2.4				
	138.3-136.1	0.01-0.031	0.027	1.6					
967	181.4-179.3	0.01-0.044	0.0276	2.2		2.2			
253.4m	176.2-174.6	0.01-0.065	0.032	1.7			1.7		
	176.2-174.6	0.01-0.065	0.043	1.1					
	13.82-10.4	0.01-0.02	0.0113	3.6	3.6				
	2.0-1.3	0.01-0.015		0.8	0.8				
969	33.7-32.9	0.01-0.028	0.02	0.9	0.9				
245.8m	8.7-8.6	0.01		0.2	0.2				
970	121.9-121.3	0.01-0.017		0.7	0.7				
280.4m	75.7-74.6	0.01-0.013		1.2	1.2				
978	67.4-66.3	0.01-0.016		1.2	1.2				
283.0m									
979	249.2-248.6	0.01-0.017		0.7	0.7				
308.3m	246.2-242.9	0.01-0.027	0.013	3.4	3.4				
	242.1-239.6	0.01-0.046	0.033	2.6			2.6		
	223.6-222.3	0.01-0.073	0.0415	1.4			1.4		
	179.7-179.4	0.01-0.012		0.4	0.4				
	144.6-138.8	0.011-0.096	0.0527	5.9				5.9	
	132.3-124.4	0.005-0.04	0.0186	8	8				
	122.6-122.1	0.01-0.046	0.021	2.8		2.8			

# Technical Report for Preliminary Assessment of the Kalnica - Selec Project

980	8.4-7.0	0.017-0.105	0.061	1.5			1.5	
252.1m	5.9-5.5	0.011-0.025		0.5	0.5			
	4.7-4.2	0.014-0.036	0.026	0.6		0.6		
	1.5-0.7	0.016-0.065	0.042	0.9			0.9	
	(-) 7.5-7.6	0.012-0.015		0.2	0.2			
1024	166.8-162.9	0.011-0.027	0.017	4.0	4.0			
354.5m	156.0-155.7	±0.01		0.4	0.4			
	147.1-147.2	0.012		0.2	0.2			
	144.2-141.6	0.02	0.021	2.7		2.7		
	(-) 0.2-1.0	0.012-0.048	0.0264	1		1		
	(-) 2.0-2.7	0.01-0.019		0.7	0.7			
	(-) 198.3-202.3	0.01-0.075	0.033	1.5			1.5	
	(-) 198.3-202.3	0.01-0.075	0.031	1			1	
	(-) 244.9-245.6	0.01-0.05		0.7	0.7			
	(-) 250.3-250.8	0.01-0.023		0.5	0.5			
1026	77.5-74.5	0.01-0.31	0.06	3				3
383.4m	(-) 98.7-99.6	0.01-0.031		0.9	0.9			
1048	101.4-101.2	0.012-0.015		0.3	0.3			
253.0m	92.0-90.7	0.015-0.042	0.032	1.4			1.4	
	83.8-83.4	0.01-0.018		0.5	0.5			
	82.7-82.6	0.01-0.011		0.2	0.2			

Width - apparent width (in meters); number below drill hole number is collar altitude (in meters asl); from-to – depths above sea level); average % uranium for given apparent width. *Italic* – an alternative with lesser width/higher grade within the same interval.

### APPENDIX III

#### Mineralization in Shallow Drill Holes (to 100 m) and Trenches

Hole #	Ore bed/lens (from-to, in meters)	Radioactive Interval (from-to, in meters)	Intensity	Note
GP001	8.0-22.0			
GP002	38.0-42.0			
GP003	29.0-35.0		weak	
GP004	20.0-24.0			
GP005				
GP006		28.0-38.0		
GP007	10.0-15.0			
GP008		25.0-32.0		
GP009		28.5-?		
GP010	5.8-8.5			
GP011	0.0-5.8			
GP012	16.0			
GP013	19.0-25.0		strong	
GP014				
GP015		18.0	very weak	
GP016	46.0 - ?		strong	
GP017	57.0; 66.0-76.0		Strong	
GP018		22.5		
GP019				
GP020				
GP021				
GP022				
GP023		?	Strong	
GP023A		73.0-79.5		
GP024				
GP025				
GP026				
GP027		43.0-46.0		
GP027A	51.0			
GP028	27.0-31.0			
GP029				
GP030				
GP031				
GP032				
GP033	26.9-29.0			
GP034	84.0-96.0		Strong	
GP035				
GP035A		56.8-63.0		

Technical Report for Preliminary Assessment of the Kalnica - Selec Project

GP036				
GP037				
GP038				
GP039				
GP040				
GP041				
GP042	55.0-67.0			
GP043	67.0-77.0		Strong	
GP044	15.0; 77.6-82.7		Second strong	
GP044A	40.0-71.0		multiple lenses	
GP045	31.5;42.0-57.0; 67.0-70.0			
GP046	46.0-76.0			
GP047				
GP048				
GP049	31.0			
GP050	54.5			
GP051				
GP052				
GP053				
GP054				
GP055	64.0-68.5; 85.4-99.3			
GP056				
GP057				
GP058	63.4-65.3; 83.0-98.0		Strong	
GP059	49.2-53.0		Strong	
GP060	23.6-26.0		Strong	
GP060A	23.0; 81.0-90.0		Strong	
GP061	55.0-110.0		Strong	
GP062	50.-59.0		Strong	
GP063				
GP065	62.0-65.0; 90.0-96.0			
GP066				
GP067	55.5; 68.2-97.0		Second strong	
GP068		75.0-110.0	Weak	
GP069	67.0		strong	
GP070				
GP071	25.8-85.0		Strong	
GP072		?	Weak	
GP073	100.40			sulphides
GP074	56.8-97.6		Local, weak	
GP075	73.0		Weak	ank, sulph
GP076		88.0		
GP077	68.6-82.0		Weak	pyritized

Technical Report for Preliminary Assessment of the Kalnica - Selec Project

GP078	16.0		Weak	
GP079		65.0 - ?	Weak	
GP080	33.0-35.0			
GP081		36.3-37.5	Weak	
GP082	41.0		Weak	
GP083	75.4-98.7		Weak	
GP084		?	Weak	
GP085		?	Medium	
GP086		25.0-27.0	Medium	
GP087		?	Weak	
GP088	40.0-55.0		Medium	
GP089		41.8-42.5	Medium	
GP090				
GP091				
GP092				
GP093				
GP094				
GP095		43.0-92.0	weak, local	to 70.5 pyritiz
GP096		24.0	Medium	
GP097		74.6-76.1	Weak	
GP098				
GP099		40.0	Weak	
GP100		3.0-30.0	Weak, local	
GP101				
GP102				
GP103				
GP104				
GP105				
GP106				
GP107				
GP108				
GP109				
GP110				
GP111				
GP112				
GP113				
GP114				
GP115		50.0-55.0		
GP116				
GP117				
GP118				
GP119		40.0-75.0	several intervls	
GP121	72.0-96.0			

Technical Report for Preliminary Assessment of the Kalnica - Selec Project

GP122				
GP123	40.5-94.0			
GP124		15.0-51.0; 84.0-90.0		
GP125		27.0-40.0; 66.0-102.0		
GP126				
GP127	20.0-90.0			
GP128	40.0-102.0		several lenses	
GP129				
GP130				(mineralized?)
GP131				(mineralized?)
GP132		38.0-56.0		
GP133		80.0-?		
GP134		84.0-96.3		
GP135		53.0-57.0		
GP136		30.0-?		
GP137				
GP138		87.0-90.0		
GP139		87.0-88.0?		
GP140				
GP141				
GP142		45.0-?		
GP143		34.0-40.0		
GP144				
GP145				
GP146	55.0;		ore lens	
GP147		40.0-?		
GP148		51.2-63.0??		
GP149		33.0-40.0		
GP150				
GP151				
GP152				
GP153		55.0-?		
GP154	60.0-63.0;		ore bed II	
GP155	64.8-97.0		ore bed II	
GP157	40.0-50.0			
GP159	65.6-101.0			
GP160		12.0-15.0		
GP161	18.0-42.0; 73.0-96.0		ore bed II	
GP163		80.0-?	ore bed II	
GP164	85.0-?; 95.5-103.0		ore bed II	
GP165				
GP166				
GP167	60.0-90.0		ore bed II	



# Technical Report for Preliminary Assessment of the Kalnica - Selec Project

GP168		93.0-96.0		
GP169				
GP170				
GP171		60.0-95.0		

Abbreviations: Ank – ankerite; sulph – sulphides; pyritiz – pyritization; ? – data missing.

## Trenches

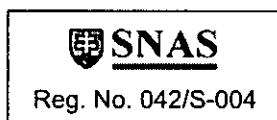
Trench #	Co-ordinates		Azimuth	Mineralized length (m)
	X	Y		
118-GR-18	1218644	502786	120	32.0
48	1218690	502784	90	20.0
27	1213370	501766	284	
28	1213394	502067	270	10.0
30	1213380	501934	315	20.0
30a,b	1213368	501938	85	9.0/5.0
32	1213302	501924	282	8.0
33	1213323	501928	280	17.0
34	1213416	501990	220	13.0
35	1213460	501966	230	4.0
36	1213404	501990	345	24.0
37	1213376	501810	33	20.0
52	1213408	502076	5	12.0
53	1213378	502074	5	15.0
38	1213694	501802	90	16.0
39	1213654	501768	90	14.0
40	1213760	501780	270	18.5
41	1213722	501774	275	
42	1213700	501764	280	15.0
43	1213674	501736	254	18.0
44	1213636	501736	255	
50	1214424	503566	290	19.5
51	1214378	503556	275	13.0
57	1213363	501870	26	208.0
118-KR-3	1220500	504422	260	1.3
7	1220502	504480	160	3.0
9	1220512	504496	115	17.0
10	1220610	504484	76	
13	1220442	504466	100	3.0
20	1220594	504460	168	
118-GR-1	1220104	504470	320	0.5
2	1220212	504510	265	10.0
5	1220233	504538	260	33.0
11	1220240	504542	265	
12	1220227	504520	265	12.0

Technical Report for Preliminary Assessment of the Kalnica - Selec Project

13	1220104	504458	328	
14	1220110	504456	308	14.0
15	1220084	504480	318	19.0
4	1219500	504070	90/112	
3	1219600	504084	100	
8	1219612	504094	90	
16	1213640	504087	110	
17	1219586	504122	112	
6	1219280	503700	18/198	21.0
7	1219260	503646	320	
21	1219816	504440	110	45.0
22	1219810	504352	130	
23	1219858	504386	100	21.0
25	1219875	504396	110	9.0
26	1219895	504410	110	

# APPENDIX IV

## ASSAY CERTIFICATES AND REFERENCE MATERIALS



Štátny geologický ústav Dionýza Štúra  
Geoanalytické laboratóriá  
Akreditované skúšobné laboratóriá  
05240 Spišská Nová Ves, tel., fax : 053  
4426096

## PROTOKOL O SKÚŠKE č. 491/2005

ASSAY PROTOCOL No. 491/2005

Počet výtlačkov :	3	Strana 1 z počtu 1
Výtlačok číslo :	1	Počet príloh : 0
Objednávateľ :	BUCK LAKE VENTURES LTD, 501 905 W. Pender St., Vancouver, BC, Canada, V6C 1L6	
Zodpov. Prac.:	Dr.B.Molák	
Tel :	001-604-682-7159	
Fax:	001-604-669-3116	
Objednávka:	31.10.2005	Dátum prevzatia vzoriek : 10/31/2005
Zákazka :	05-00894	Dátum vykonania skúšok : 11/1/2005
Počet vzoriek :	2	Dátum vystavenia protokolu: 11/21/2005
Údaje o vzorkách :	Vzorky odobral: Objednávateľ:	
Označenie :	M094878,M0	Miesto odberu : Neudané
Typ vzorky:	94879	Dátum a čas odberu: Neudané
Popis vzorky :	hornina	

## Výsledky skúšok (Assay results)

Lab.číslo		05-005041	05-005042	Relat.	Hranica	Metóda	Metod.	Typ
Označ.		M094878	M094879	neist.	Stanov.		Predpis	skúšky
Lab #		Sample #	Sample#	Relat.	Detect.	Method	Code	Assay
				Uncert.	Limit			Type
SiO <sub>2</sub>	[%]	82.04	77.38	1	0.01	RFS	PN 3.1	A
Al <sub>2</sub> O <sub>3</sub>	[%]	8.34	11.92	2	0.01	RFS	PN 3.1	A
Fe <sub>2</sub> O <sub>3</sub>	[%]	2.32	1.94	2	0.01	RFS	PN 3.1	A
CaO	[%]	0.29	0.08	10	0.01	RFS	PN 3.1	A
MgO	[%]	0.66	0.80	5	0.01	RFS	PN 3.1	A
TiO <sub>2</sub>	[%]	0.158	0.319	5	0.005	RFS	PN 3.1	A
MnO	[%]	0.016	0.010	7	0.005	RFS	PN 3.1	A
P <sub>2</sub> O <sub>5</sub>	[%]	0.04	0.03	10	0.01	RFS	PN 3.1	A
Na <sub>2</sub> O	[%]	0.05	0.05	7	0.01	RFS	PN 3.1	A
K <sub>2</sub> O	[%]	3.12	4.52	2	0.01	RFS	PN 3.1	A

# Technical Report for Preliminary Assessment of the Kalnica - Selec Project

str.žih.	[%]	2.45	2.55	5	0.01	G	PN 11.3	A
H2O-	[%]	0.27	0.33	7	0.01	G	PN 11.2	A
Th	[ppm]	<3	<3			RFS	PN 3.2	A
U	[ppm]	65	73	10	3	RFS	PN 3.2	A

Relatívna neistota : relatívna kombinovaná štandardná neistota s koeficientom rozšírenia k=2

Skúšobné laboratórium prehlasuje, že výsledky skúšok sa týkajú len predmetu skúšok.

Tento protokol môže byť reprodukováný jedine celý a s písomným súhlasom skúšobného laboratória.

Akreditácia laboratória alebo jeho protokol o skúške sám osebe neznamena v žiadnom prípade schválenie výrobku orgánom udeľujúcim certifikáciu alebo akýmkoľvek iným orgánom.

Reklamovať výsledky laboratórnych skúšok možno do 30 dní od dátumu odoslania výsledkov zákazníkom. Akceptované sú písomne podané žiadosti.

## Popis skratiek :

RFS röntgenfluorescenčná spektrometria  
G gravimetria  
PN podniková norma

## Typ skúšky

A - akreditovaná, N - neakreditovaná, SA - subdodávka akreditovaná, SN - subdodávka neakreditovaná

Protokol o skúške vyhotovil: (Assay protocol prepared by:)

RNDr. Nováková  
Jarmila

Protokol o skúške schválil: (Assay protocol approved by:)

RNDr. Findura  
Lubomír

Refer. mat.	SiO2	Al2O3	Fe2O3	CaO	MgO	TiO2	MnO	P2O5	Na2O	K2O
Envipt 1	%	%	%	%	%	%	%	%	%	%
cert.	68.41	13.87	6.69	3.66	1.62	0.584	0.049	0.11	0.71	1.83
namer.	68.32	13.95	6.62	3.7	1.67	0.582	0.049	0.11	0.65	1.78
GSD 10										
cert.	88.89	2.84	3.86	0.7	0.12	0.212	0.13	0.06	0.04	0.13
namer.	89.06	2.84	3.83	0.68	0.15	0.209	0.125	0.07	<0.1	<0.1
GSR-1										
	U	Th								
	Mg/kg	mg/kg								
Cert.	18.8	54								
namer.	20	53								
GEOPT-1										
Cert.	3.2	7.1								
namer.	3	6.4								
GEOPT-10										

# Technical Report for Preliminary Assessment of the Kalnica - Selec Project

Cert.	2.6	11.9
namer.	2.7	11.3
<b>GEOPT-6</b>		
Cert.	5.5	22.8
namer.	6.3	21.5

Štátny geologický ústav D.Štúra  
 Geoanalytické laboratóriá  
 Akreditované skúšobné laboratóriá  
 Referenčné laboratórium MŽP SR  
 Spišská Nová Ves

## Výsledky skúšok (Assay Results 2006)

LAB.Č.	OZNAČENIE (Sample #)	U mg/kg	Th mg/kg	K2O %
06-006409	94895 Kalnica – 09/25/06	5	9	4.31
06-006410	94894 50m E 08 adit – 09/25/06	110	4	2.71
06-006411	94896 Selec – 09/28/06	45	4	2.82
06-006412	94893 Near adit 62 collar - 09/25/06	39	6	3.91
06-006413	94892 Selec outcrop beside adit 62	52	4	2.90
Rozšírená neistota (%) (extended uncertainty %)		10	15	5
Hranica stanovenia (detection limit)		3	3	0.05
Metóda (Method)		RFS	RFS	AES-ICP

## REFERENCE MATERIALS (2006)

Referenčný material	CERT. NAMER.	CERT. NAMER.	CERT. NAMER.
	48,8	10,5	
SDO-1	49	10	
	141,4		
NBS 694	140		
	18,8	54	
GSR-1	22	53	
		23	
GSS-6	6,7	7	24
	3,2		7,1
GEOPT-1	3,6	6	
	0,4	1,7	
GEOPT-2	0,6	1,7	
			1,99
GBW 07309			1,93

Extended uncertainty is relative combined standard uncertainty with a coverage coefficient.

# Technical Report for Preliminary Assessment of the Kalnica - Selec Project

List of Standards used by the Geo-analyticke laboratoria of the SGUDS, Spisska Nova Ves:

<b>Name</b>	<b>Lithology</b>	<b>Source</b>
SDO-1	shale	China
NBS 694	phosphorite	NIST-USA
GSR-1	granite	China
GSS-6	soil	China
GEOPT-1	microgranodiorite	Great Britain
GEOPT-2	volcanic tuff	Great Britain
GEOPT-10	?	?
GBW 07309	sediment	China

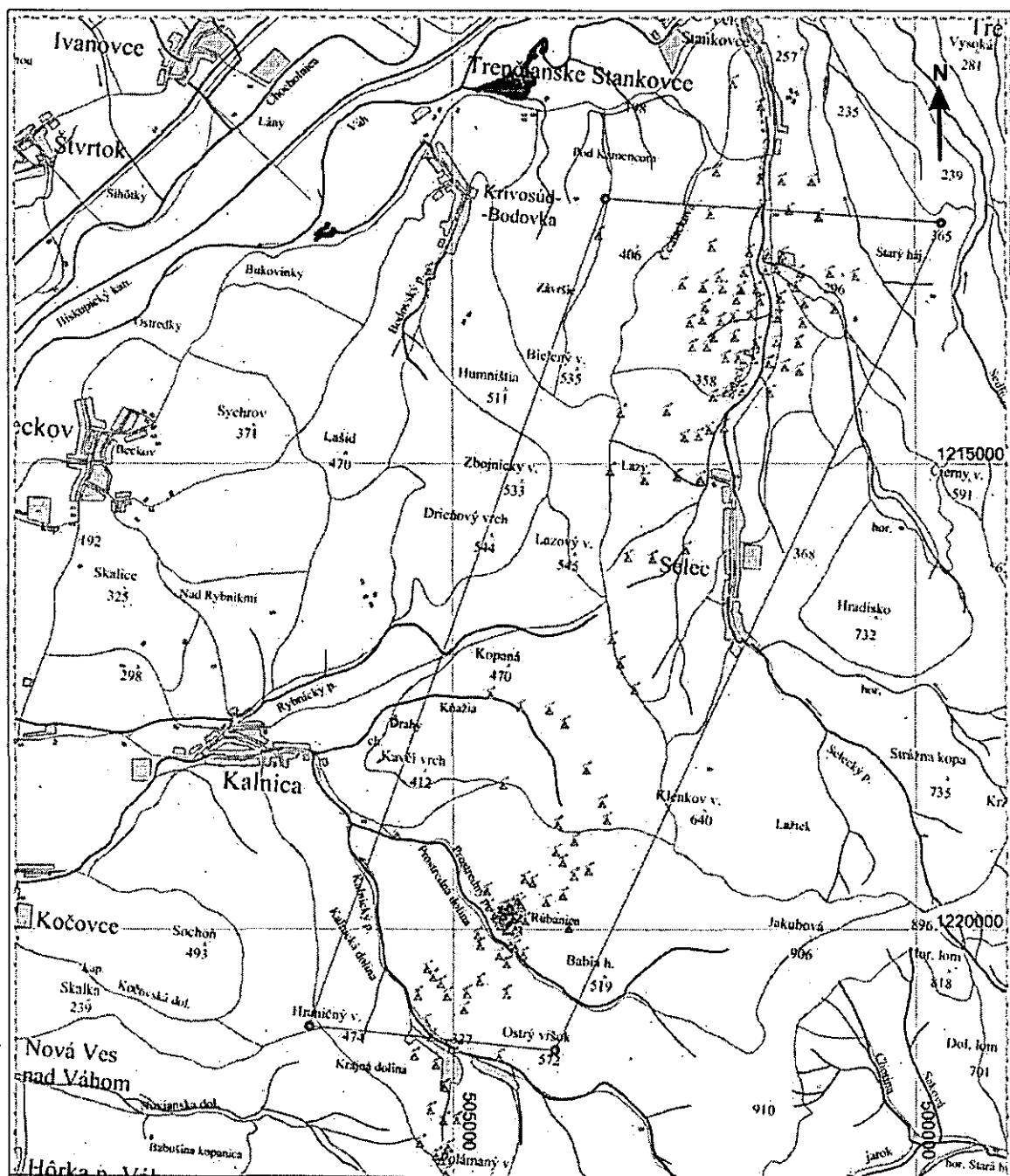
## APPENDIX V

### A Comparison of Reserve and Resource Classifications

UN International framework	Detailed Exploration	General Exploration	Prospecting	Reconnaissance
C.I.M.	Measured	Indicated	Inferred	
Feasibility Study or Mining Report	Proved mineral reserves (A+B) Feasibility mineral resource			
Pre-feasibility Study	1. Probable mineral reserve (economic resource) 2. Pre-feasibility mineral resource (non-economic resource)			
Geological Study	1-2 Measured mineral resource	1-2 Indicated mineral resource	1-2 Inferred mineral resource	Reconnaissance mineral resource
"Russian (Soviet)" system	A+B	C1	C2	D1, D2
Recently in Slovakia	Z1 (Proved)	Z2 (Probable)	Z3 (Supposed)	P1, P2 (Prognostic resources)







0 500 1000 1500 2000 2500 m

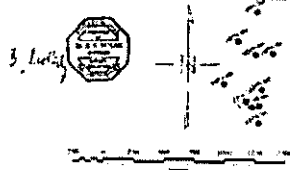
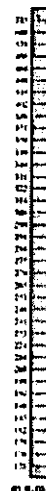


License Area

<b>ULTRA URANIUM CORP.</b>	
Kalnica-Selec License Area with Situation of Diamond Drill Holes	
After: Koral s.r.o.	Fig. 2

# Digital terrain model

Kalnica - Selec  
(with Situation of Diamond Drill Holes  
and Radiometric Survey Grid)



## Digital Terrain Model:

Digital Terrain Model DMU50 derived  
from the Topographic Map of Slovak Republic, scale 1:50 000  
Map sheets: 38-21, 38-23  
Submitted by GKU (Geodetic and Cartographic Institute of Slovak Republic)  
Coordinates System JTSK  
• Diamond Drill Hole  
..... Radiometric Survey Line

## ULTRA URANIUM CORP.

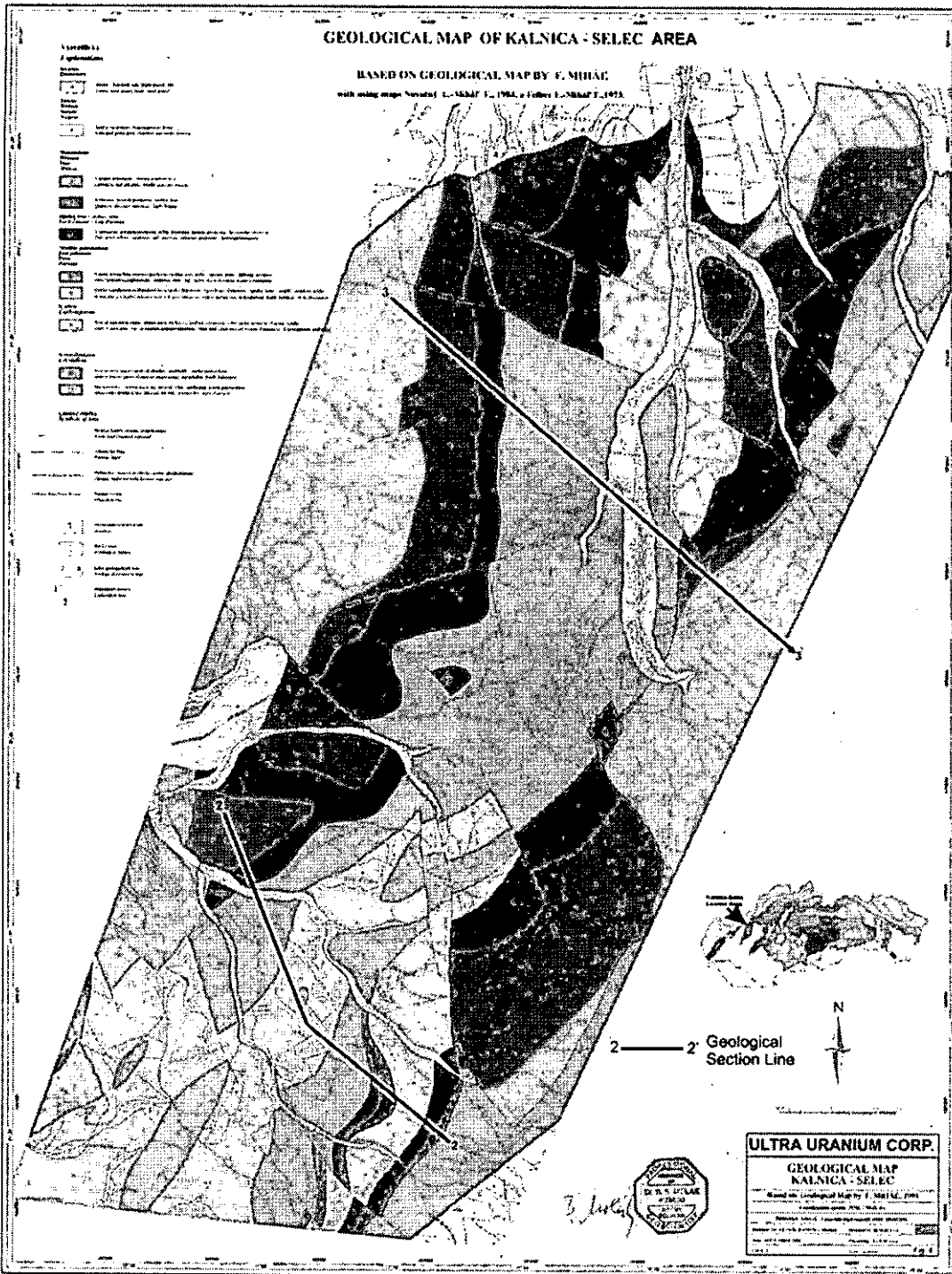
TOPOGRAPHIC MAP OF THE  
KALNICA-SELEC AREA WITH  
SITUATION OF DIAMOND DRILL  
HOLES AND RADIO-METRIC GRID

Fig. 3

KORAL s.r.o. Spisová Nová Ves

# GEOLOGICAL MAP OF KALNICA - SELEC AREA

BASED ON GEOLOGICAL MAP BY F. MIHÁČ  
with existing maps: Novotná J., 1964, a Foliovy L. 1973



2 — 2' Geological Section Line

ULTRA URANIUM CORP.  
GEOLOGICAL MAP  
KALNICA - SELEC  
Based on Geological Map by F. Miháč, 1964  
Geological Survey of the Czech Republic, Prague  
Scale 1:50,000  
Sheet 1:100,000  
1973

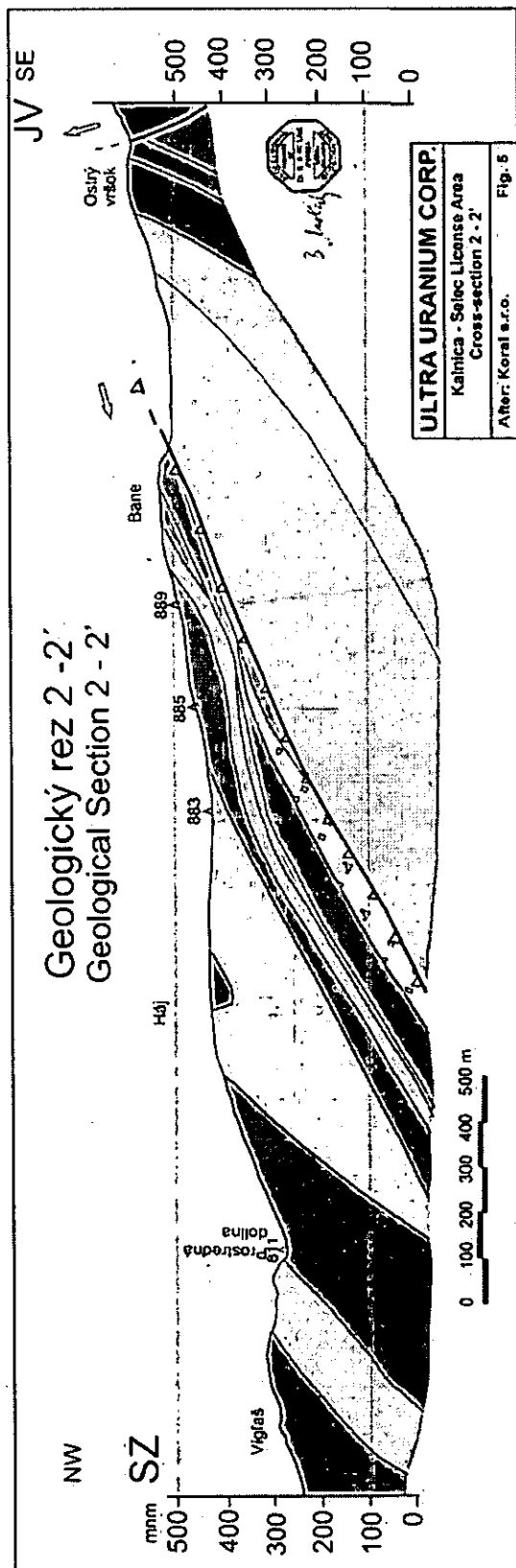


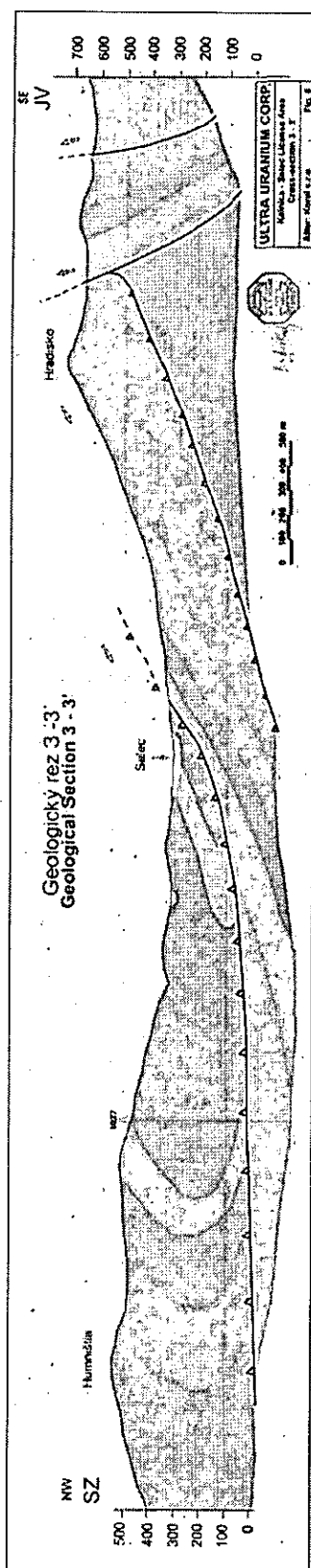
	011	m	Muscovite-chlorite schist, siliceous phyllite, amphibolite, Early Paleozoic
	016	vm	Grey schistose gneiss (Variscan diaphanite)
	022	dc	Dark-green mafic and intermediary volcanics and their volcanic-clastics; Novany Formation
	041	cs	Grey to dark grey, fine- to medium grained sandstone, shale
	046	vc	Grey to dark grey, fine- to medium grained sandstone, shale and conglomerate, Novany Formation - Carboniferous, undivided
	056	wp	Green-grey and grey, coarse, arkosic sandstone and conglomerate, lesser tuffite, II.B (Lower) ore bed - Selec Formation
	064	wp	Variegated sandstone, shale and polymict conglomerate - Selec Formation
	065	sp	Green and grey paleo-rhyolite, tuffo-lavas - Selec, locally Kalnica Formation
	067	sp	Green and grey, predominantly fine volcanic-clastics of acid character, ore bed I, Selec Formation
	068	sp	Green and grey, coarse arkosic sandstone and conglomerate, locally tuffite, ore bed II.A (upper) - Selec Formation
	069	sp	Green and grey volcanic-clastics of acid character, with conglomerate intercalations, Early Permian - Selec Formation
	071	sp	Mainly violet, polymict conglomerate, lesser sandstone, shale, tuff, tuffite, Early Permian - Kalnica Formation
	072	sp	Violet sandstone, shale with conglomerate intercalations, tuff, tuffite, Early Permian, Kalnica Formation
	073	sp	Violet polymict conglomerate, sandstone, shale, tuff, tuffite, Early Permian, Kalnica Formation, undivided
	074	sp	Pale-green arkosic sandstone, tuff, quartzite, siliceous sandstone, Early Triassic - Late Permian - Krvošćak Formation
	075	sp	Quartzite, siliceous sandstone, Early Triassic
	041	sp	Shale, evaporites, cavernous carbonates, Early Triassic
	042	sp	Variegated shale, sandstone, sandy carbonates, Early Triassic
	043	sp	Limestone and dolomite, Middle and Late Triassic
	044	sp	Grey and Green-grey claystone and sandy claystone
	045	sp	Quaternary loamy-stony scree, loams, sand, gravel
	046	sp	U - Cu mineralization, bed I
	047	sp	U - Cu mineralization, bed II.A
	048	sp	U - Cu mineralization, bed II.B
	049	sp	U - Cu mineralization, not determined in detail
	050	sp	Quartz-carbonate veins without mineralization
	051	sp	Quartz-carbonate veins with Cu - mineralization
	052	sp	Pyrite impregnation
	053	sp	Fault
	054	sp	Overthrust (nappe) plane faulting



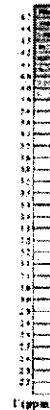
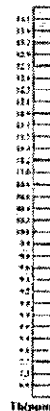
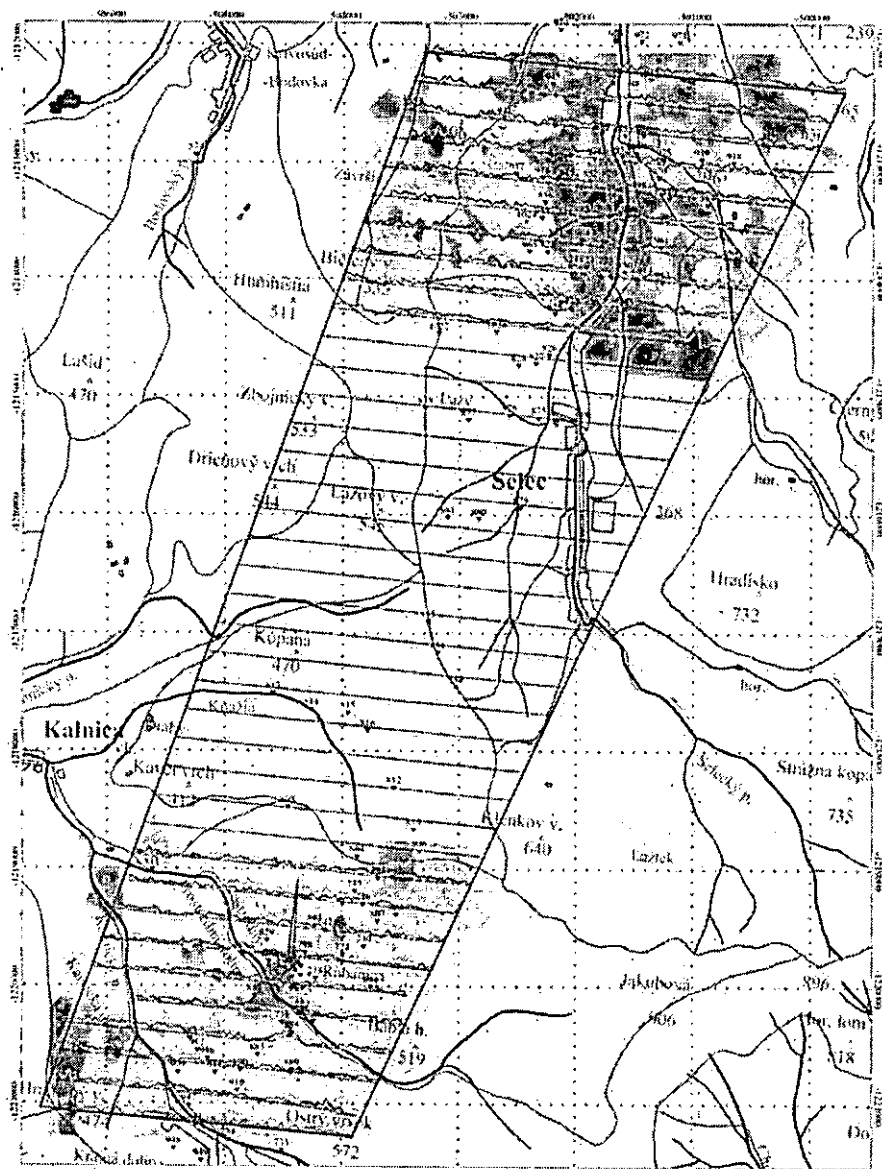
ULTRA URANIUM CORP  
 LEGEND OF GEOLOGICAL  
 MAP AND SECTIONS  
 KALNICA - SELEC AREA

Fig 4a





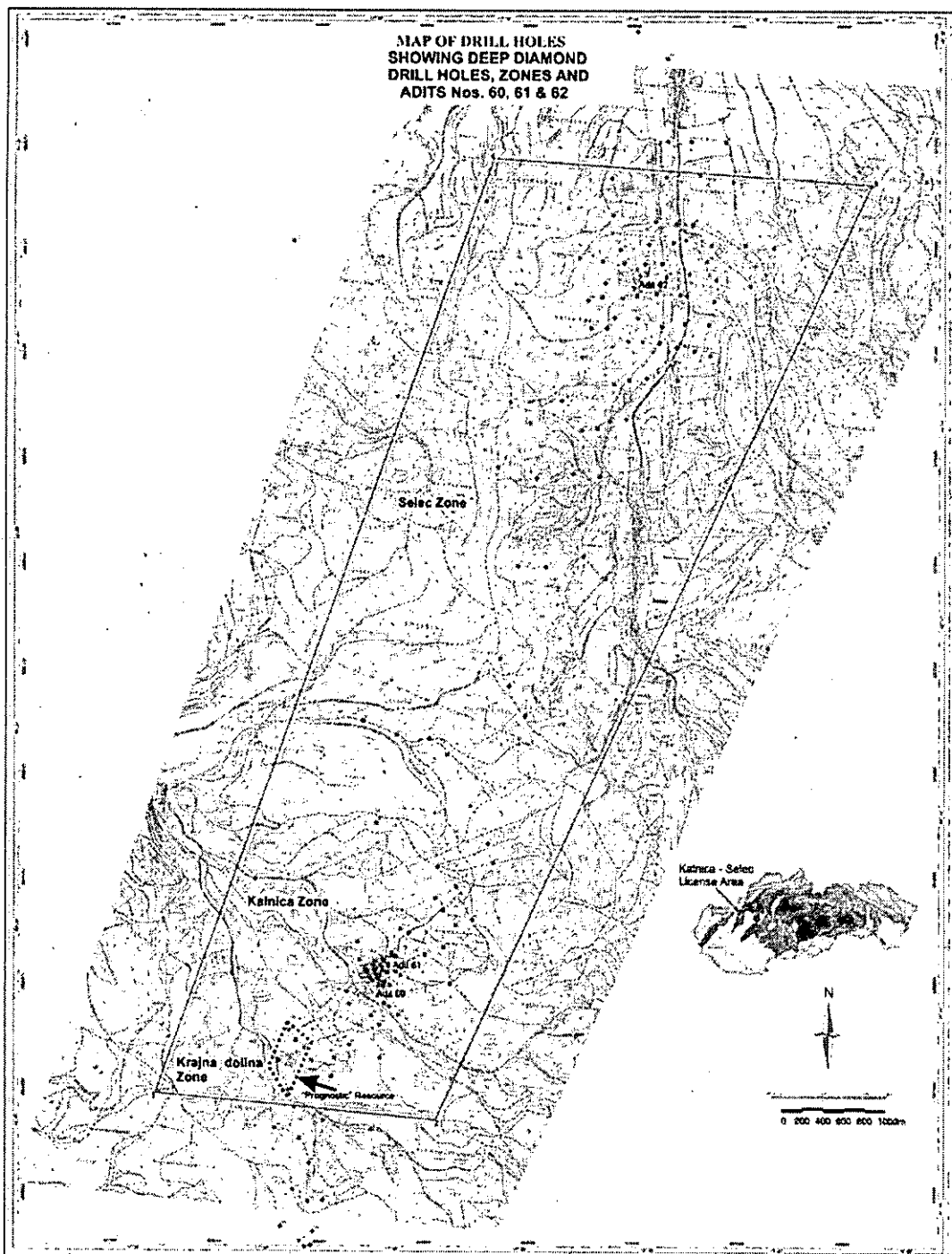
Contents K, U, Th  
Kalnica - Selec



**ULTRA URANIUM CORP.**  
Gamma-spectrometric Map  
Kalnica - Selec License

After: Koral s.r.o. Fig. 7

MAP OF DRILL HOLES  
SHOWING DEEP DIAMOND  
DRILL HOLES, ZONES AND  
ADITS Nos. 60, 61 & 62



B. Jurek



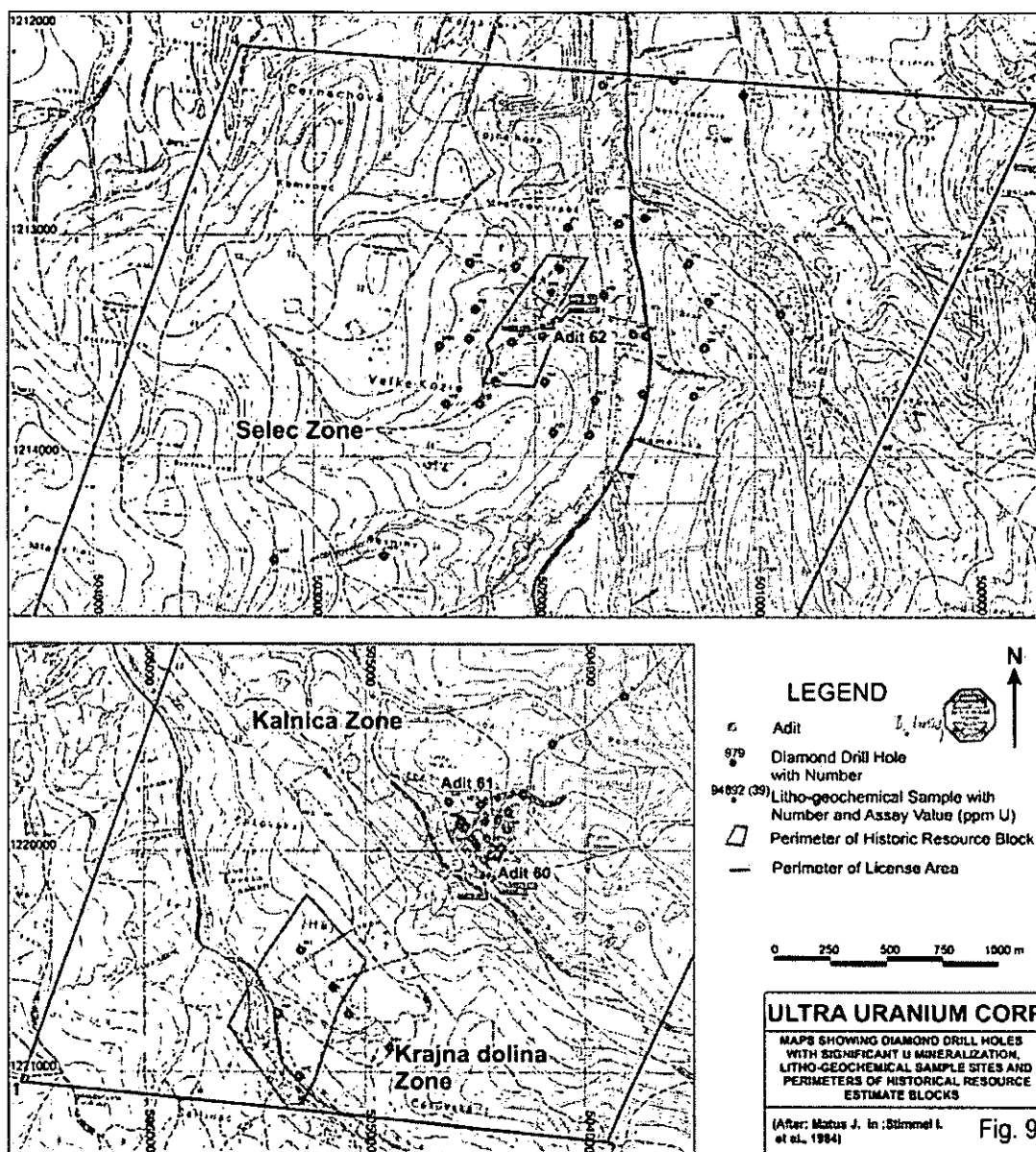
**ULTRA URANIUM CORP.**

Map Showing Diamond Drill Holes,  
Zones and Adits in the  
Kalnica - Selec License Area

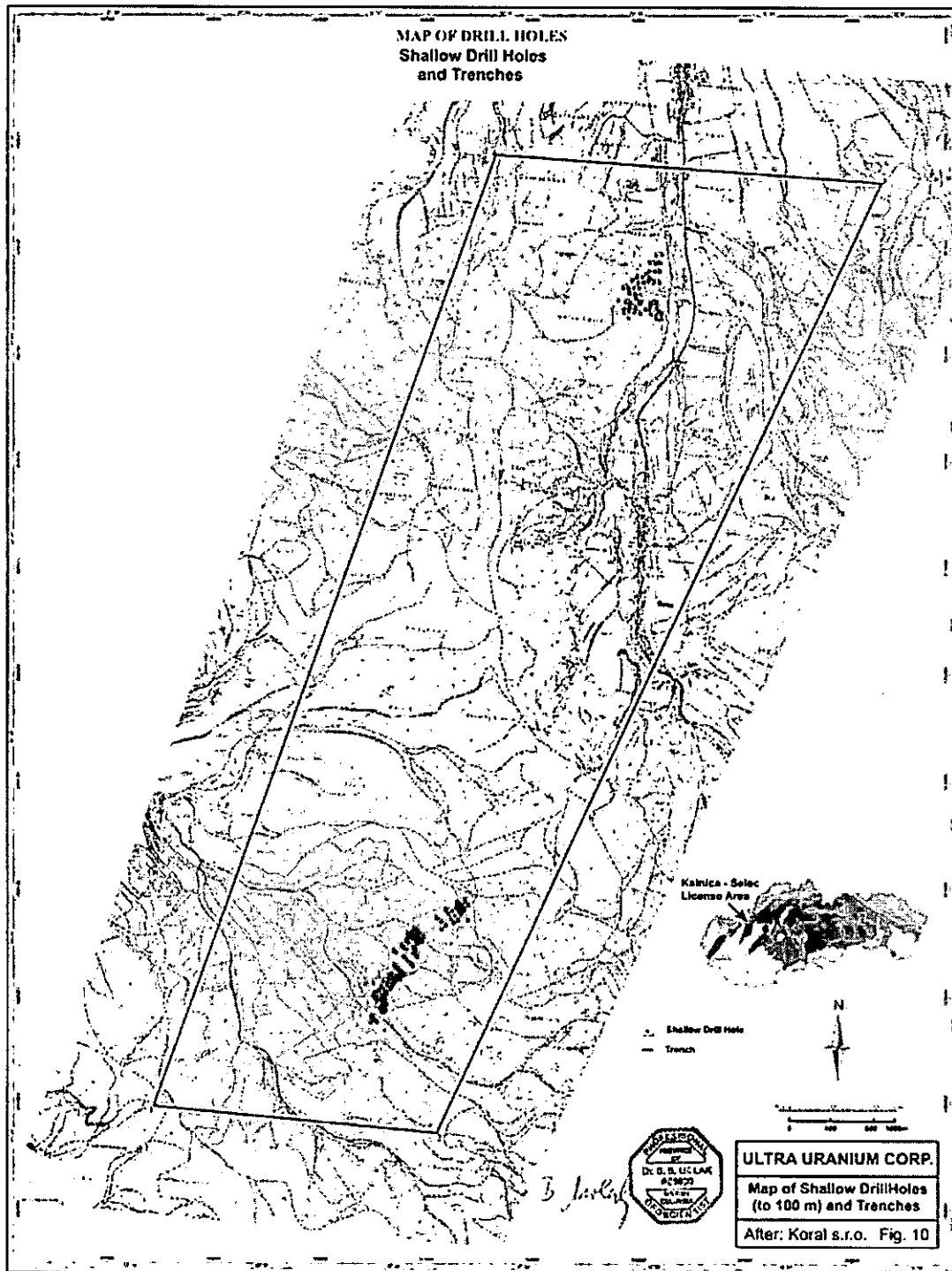
After: Koral s.r.o.

Fig. 8





MAP OF DRILL HOLES  
Shallow Drill Holes  
and Trenches



# HORIZONTALNA GEOLOGICKÁ MAPA

Považský Inovec - Kálnica, št. č. 60

M. 1:12 000

Zostavil uč. J. Stimmel

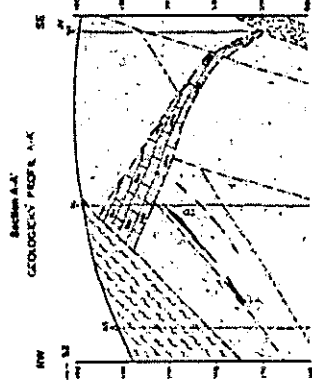
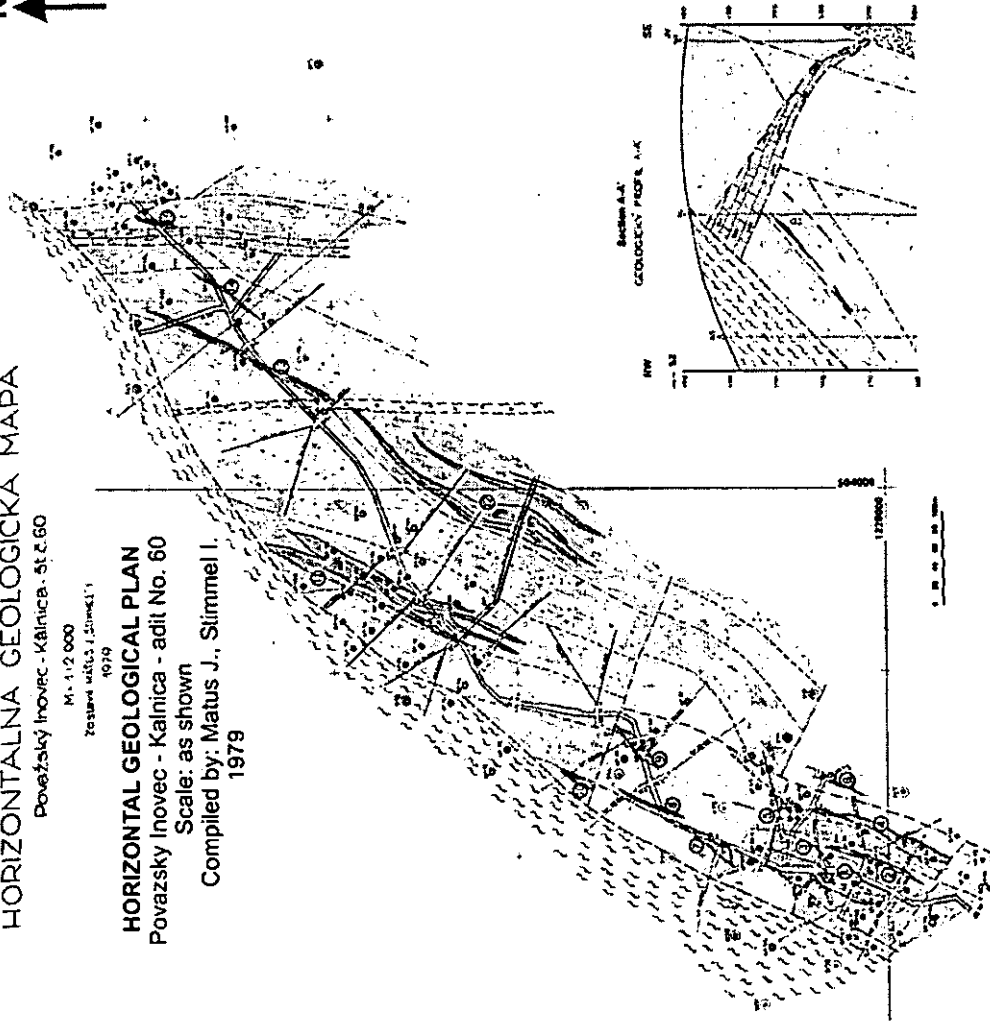
1979

## HORIZONTAL GEOLOGICAL PLAN

Považsky Inovec - Kálnica - adit No. 60

Scale: as shown

Compiled by: Matus J., Stimmel J.  
1979



### EXPLANATIONS

- VÝSVE TLAKY**
- 1. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 2. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 3. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 4. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 5. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 6. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 7. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 8. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 9. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 10. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 11. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 12. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 13. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 14. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 15. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 16. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 17. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 18. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 19. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 20. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 21. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 22. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 23. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 24. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 25. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 26. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 27. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 28. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 29. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 30. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 31. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 32. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 33. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 34. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 35. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 36. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 37. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 38. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 39. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 40. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 41. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 42. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 43. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 44. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 45. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 46. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 47. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 48. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 49. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 50. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 51. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 52. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 53. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 54. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 55. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 56. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 57. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 58. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 59. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 60. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 61. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 62. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 63. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 64. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 65. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 66. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 67. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 68. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 69. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 70. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 71. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 72. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 73. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 74. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 75. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 76. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 77. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 78. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 79. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 80. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 81. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 82. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 83. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 84. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 85. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 86. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 87. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 88. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 89. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 90. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 91. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 92. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 93. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 94. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 95. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 96. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 97. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 98. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 99. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)
  - 100. **ČERNÝ** - ČERNÝ SLANEC (ČERNÝ SLANEC)



*B. Jurek*

ULTRA URANIUM CORP.

GEOLOGICAL MAP OF ADIT No. 60  
AND CROSS SECTION A - A'

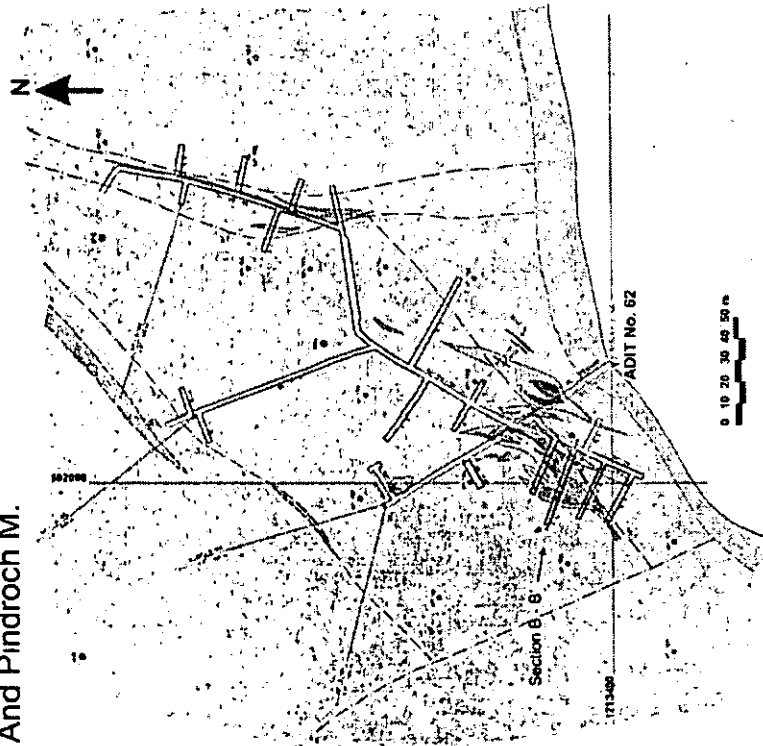
After: Mihal J. - Stimmel J., 1979 Fig.11



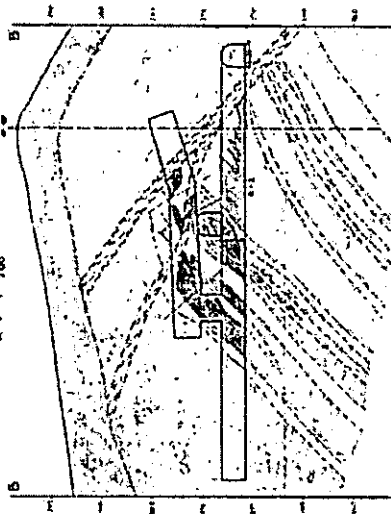
HORIZONTÁLNA GEOLOGICKÁ MAPA ŠTOLNE Č. 62  
 S VŮLEBKAMI PRIEDŮJUMNÝCH PRAC  
 POVAŽSKÝ INOVEC - TRENCIANSKE STANKOVCE

M - 1 1000

GEOLOGICAL MAP OF ADIT No. 62  
 with the Results of Exploration Works  
 Povazsky Inovec - Trencianske Stankovce  
 Compiled by: Matus J., Stimmel I.  
 And Pindroch M.



VERTICAL SECTION B - B'  
 VERTIKÁLNY PREREZ B - B'



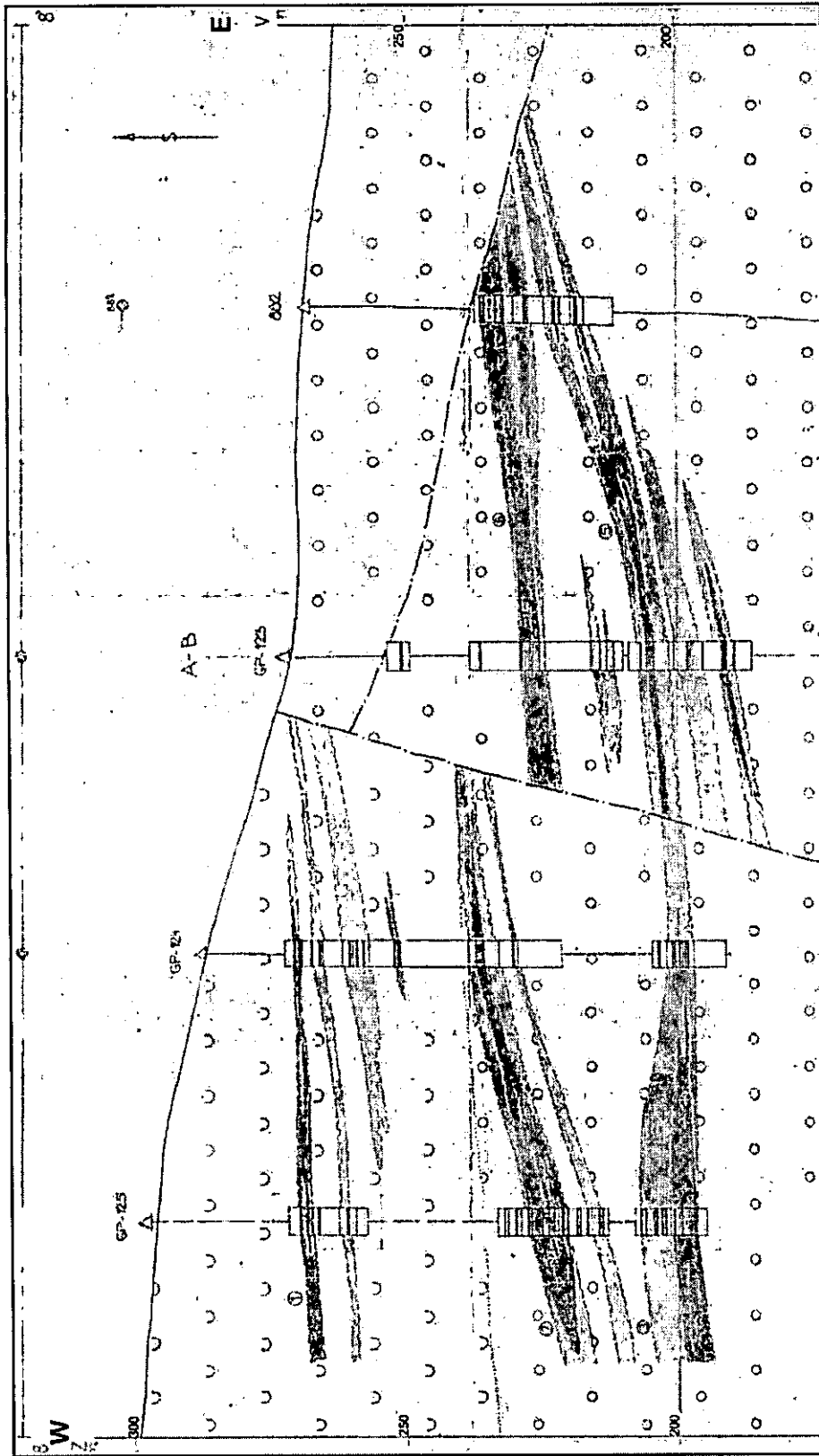
VŮBĚTILNÝCH  
 EXPLANATIONS

- 1. ADIT NO. 62
- 2. ADIT NO. 62
- 3. ADIT NO. 62
- 4. ADIT NO. 62
- 5. ADIT NO. 62
- 6. ADIT NO. 62
- 7. ADIT NO. 62
- 8. ADIT NO. 62
- 9. ADIT NO. 62
- 10. ADIT NO. 62
- 11. ADIT NO. 62
- 12. ADIT NO. 62
- 13. ADIT NO. 62
- 14. ADIT NO. 62
- 15. ADIT NO. 62
- 16. ADIT NO. 62
- 17. ADIT NO. 62
- 18. ADIT NO. 62
- 19. ADIT NO. 62
- 20. ADIT NO. 62
- 21. ADIT NO. 62
- 22. ADIT NO. 62
- 23. ADIT NO. 62
- 24. ADIT NO. 62
- 25. ADIT NO. 62
- 26. ADIT NO. 62
- 27. ADIT NO. 62
- 28. ADIT NO. 62
- 29. ADIT NO. 62
- 30. ADIT NO. 62
- 31. ADIT NO. 62
- 32. ADIT NO. 62
- 33. ADIT NO. 62
- 34. ADIT NO. 62
- 35. ADIT NO. 62
- 36. ADIT NO. 62
- 37. ADIT NO. 62
- 38. ADIT NO. 62
- 39. ADIT NO. 62
- 40. ADIT NO. 62
- 41. ADIT NO. 62
- 42. ADIT NO. 62
- 43. ADIT NO. 62
- 44. ADIT NO. 62
- 45. ADIT NO. 62
- 46. ADIT NO. 62
- 47. ADIT NO. 62
- 48. ADIT NO. 62
- 49. ADIT NO. 62
- 50. ADIT NO. 62
- 51. ADIT NO. 62
- 52. ADIT NO. 62
- 53. ADIT NO. 62
- 54. ADIT NO. 62
- 55. ADIT NO. 62
- 56. ADIT NO. 62
- 57. ADIT NO. 62
- 58. ADIT NO. 62
- 59. ADIT NO. 62
- 60. ADIT NO. 62
- 61. ADIT NO. 62
- 62. ADIT NO. 62
- 63. ADIT NO. 62
- 64. ADIT NO. 62
- 65. ADIT NO. 62
- 66. ADIT NO. 62
- 67. ADIT NO. 62
- 68. ADIT NO. 62
- 69. ADIT NO. 62
- 70. ADIT NO. 62
- 71. ADIT NO. 62
- 72. ADIT NO. 62
- 73. ADIT NO. 62
- 74. ADIT NO. 62
- 75. ADIT NO. 62
- 76. ADIT NO. 62
- 77. ADIT NO. 62
- 78. ADIT NO. 62
- 79. ADIT NO. 62
- 80. ADIT NO. 62
- 81. ADIT NO. 62
- 82. ADIT NO. 62
- 83. ADIT NO. 62
- 84. ADIT NO. 62
- 85. ADIT NO. 62
- 86. ADIT NO. 62
- 87. ADIT NO. 62
- 88. ADIT NO. 62
- 89. ADIT NO. 62
- 90. ADIT NO. 62
- 91. ADIT NO. 62
- 92. ADIT NO. 62
- 93. ADIT NO. 62
- 94. ADIT NO. 62
- 95. ADIT NO. 62
- 96. ADIT NO. 62
- 97. ADIT NO. 62
- 98. ADIT NO. 62
- 99. ADIT NO. 62
- 100. ADIT NO. 62



ULTRA URANIUM CORP.  
 T. Stankovce (Selec Zone)  
 Geological Map of Adit 62  
 and Cross Section B - B'  
 (Scale: as shown)

After: Matus J.,  
 Stimmel I., Pindroch M.  
 Fig. 13



ULTRA URANIUM CORP.

Select Zone: Section 8 - 8' through the Ore Bodies Nos. 1, 2, 3, 5 and 6



3 July

Alter: Matus J. and Stimmel L. (1984)

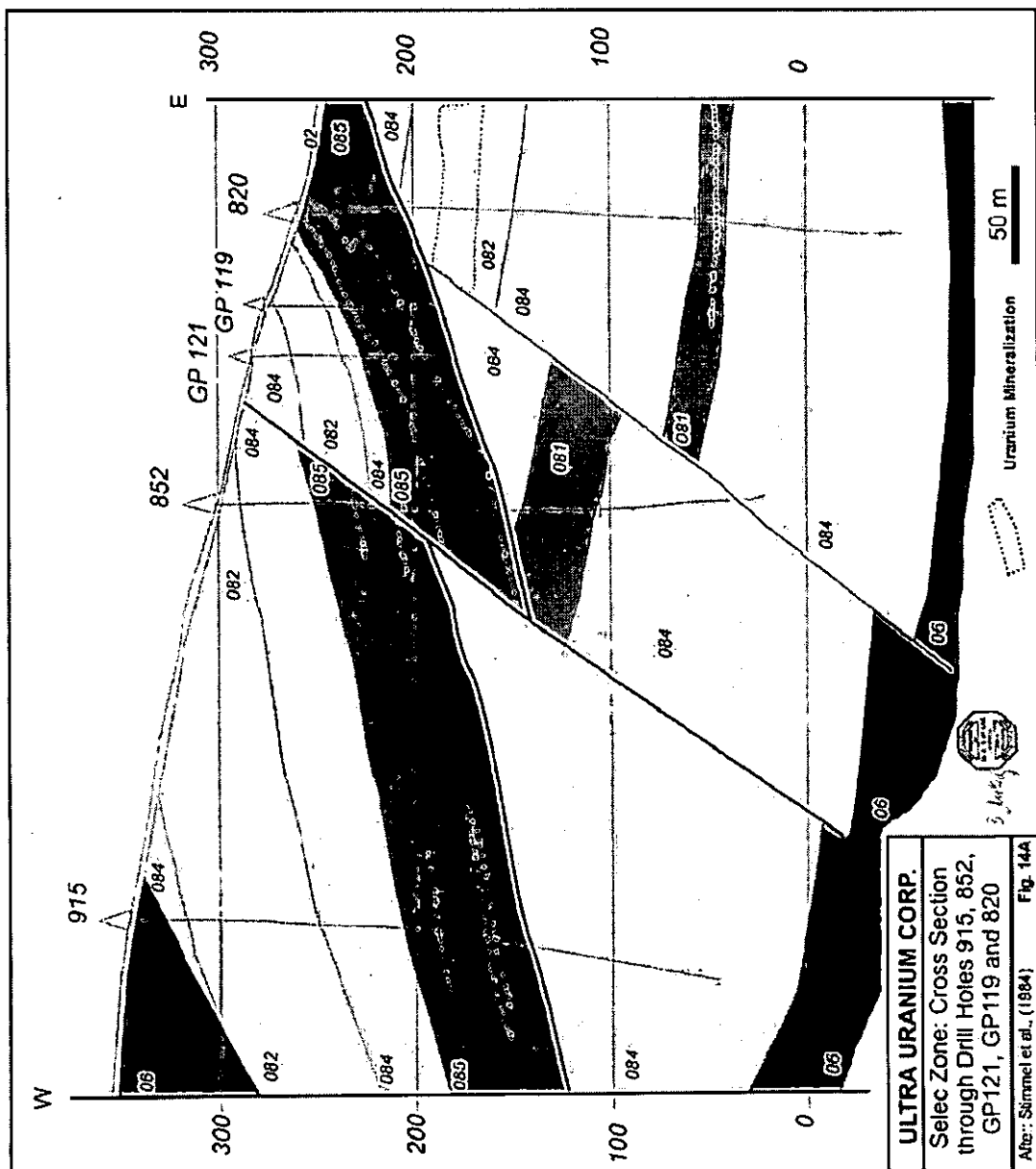
Fig. 14

0 10 20 30 40 50 m

0.015 - 0.02 % U

0.021 - 0.05 % U

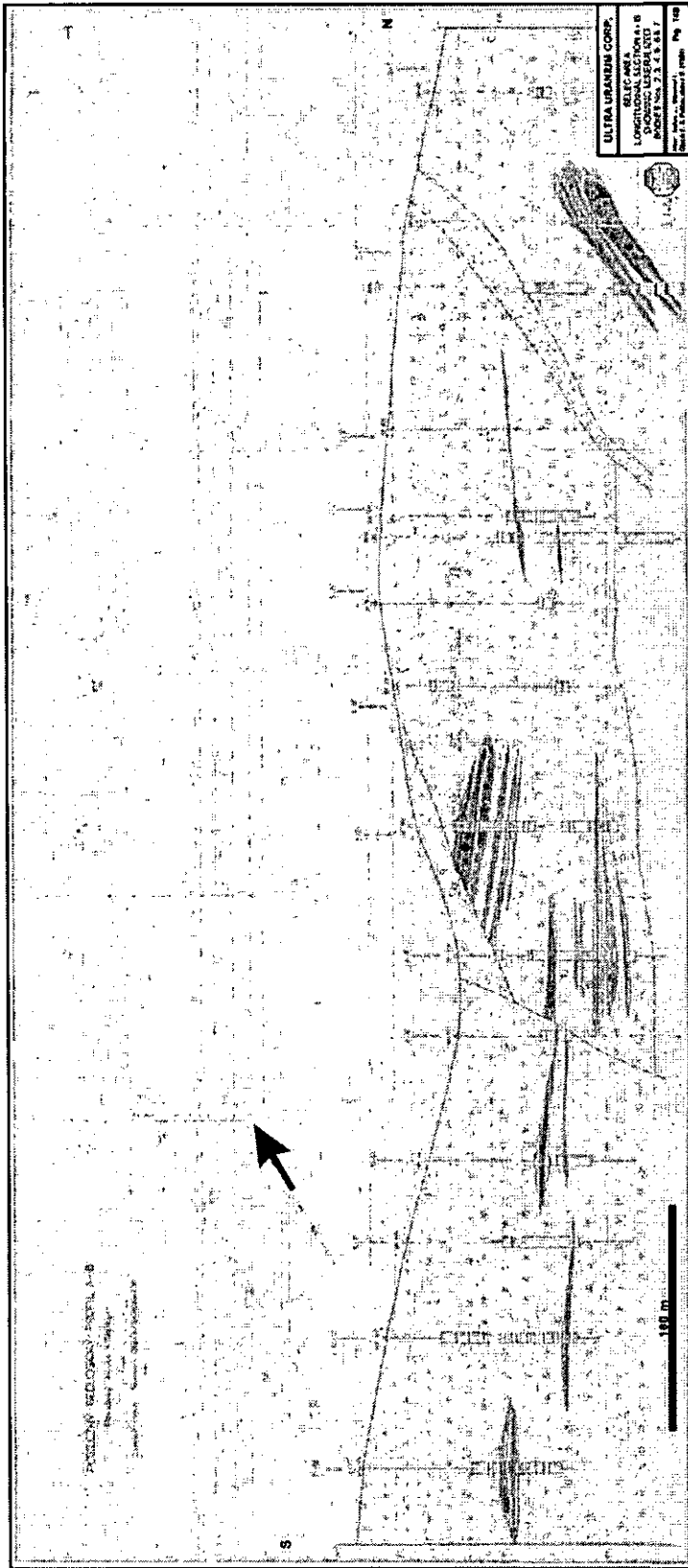
> 0.05 % U



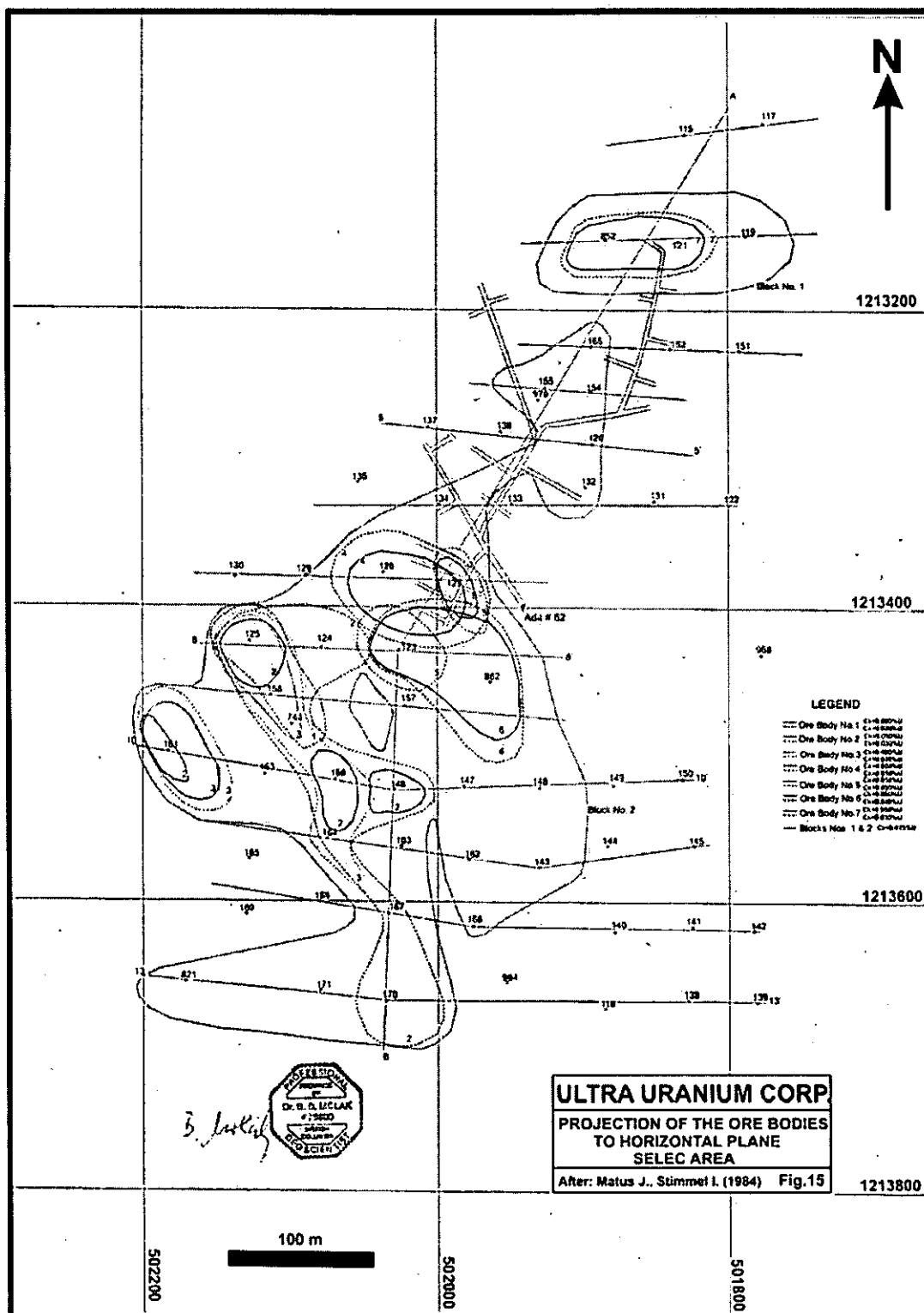
**ULTRA URANIUM CORP.**

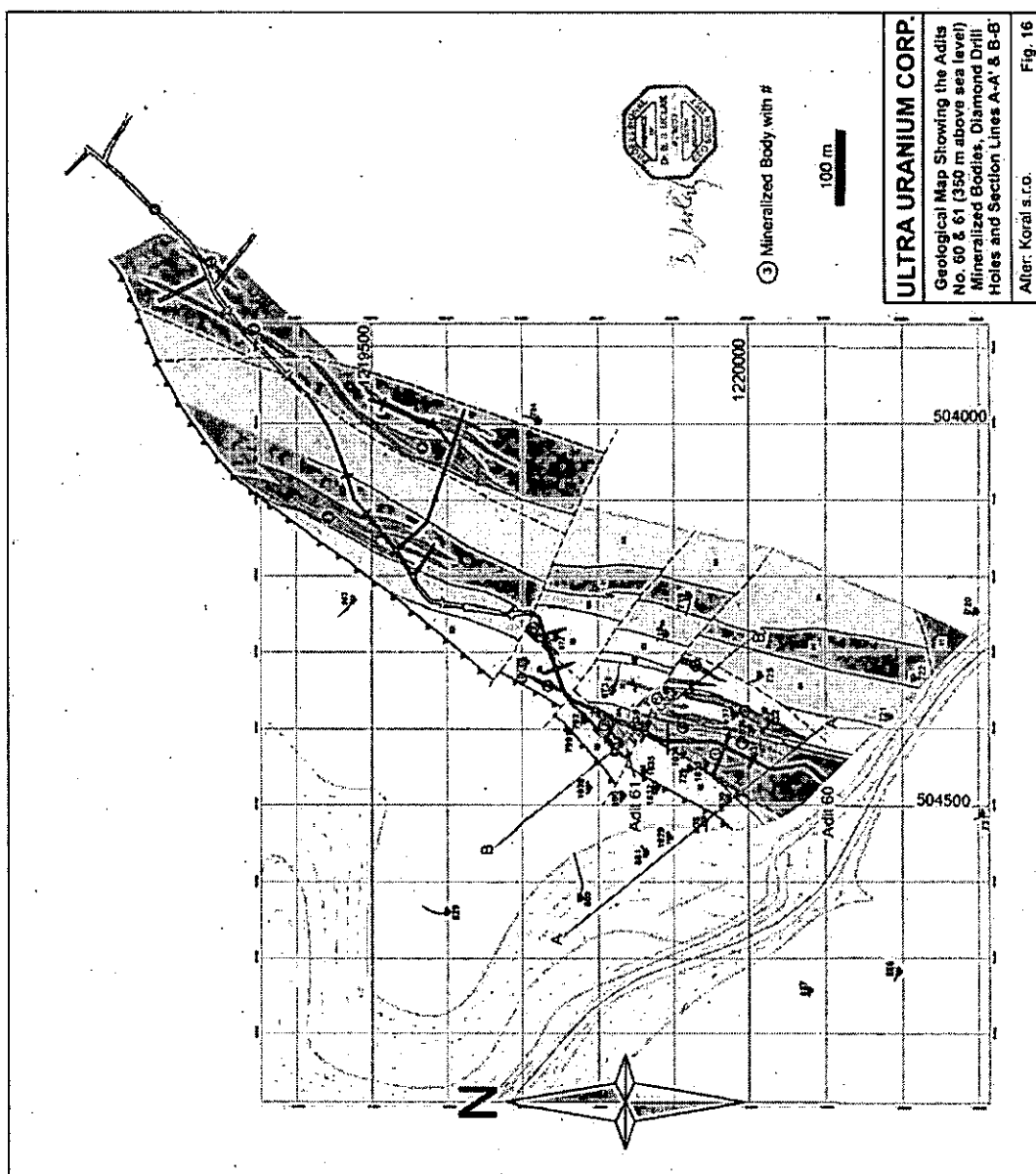
Selec Zone: Cross Section  
through Drill Holes 915, 852,  
GP121, GP119 and 820

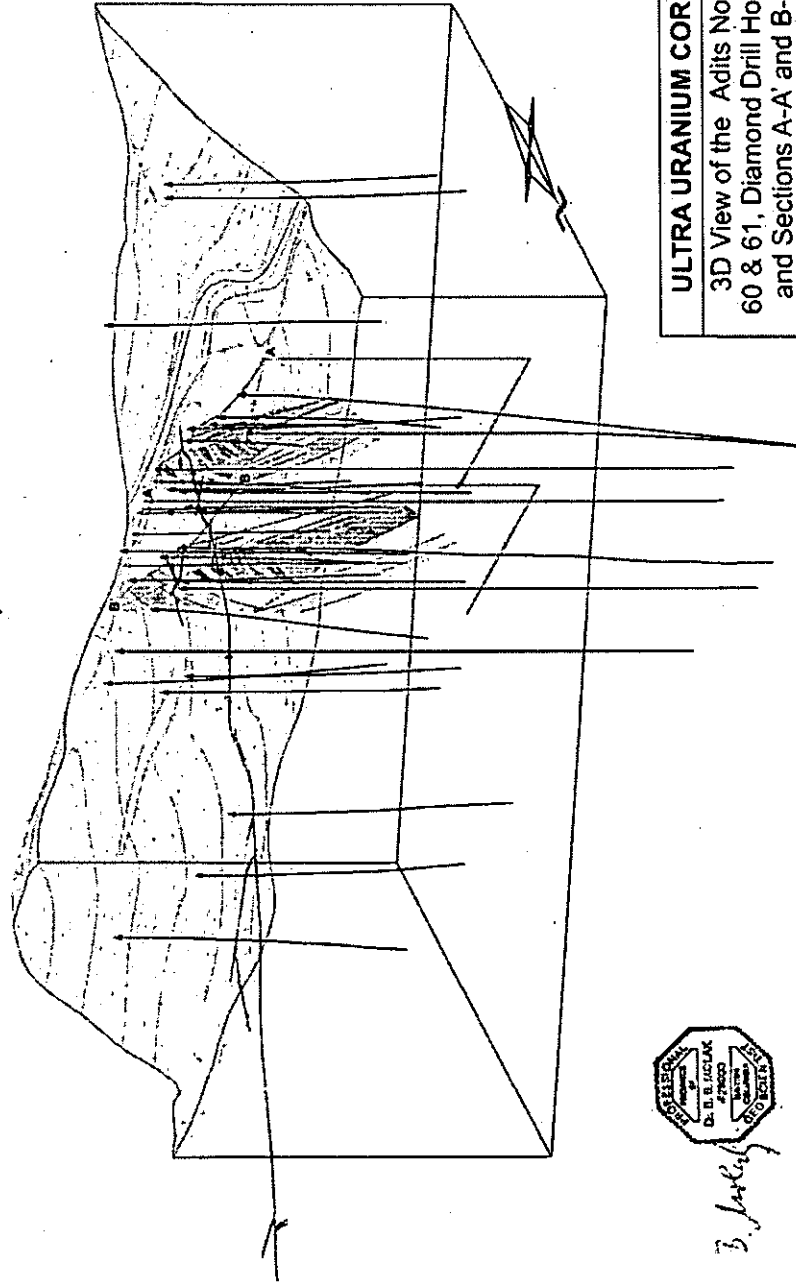
After: Sirmel et al., (1984) Fig. 14A











*B. J. J. J.*

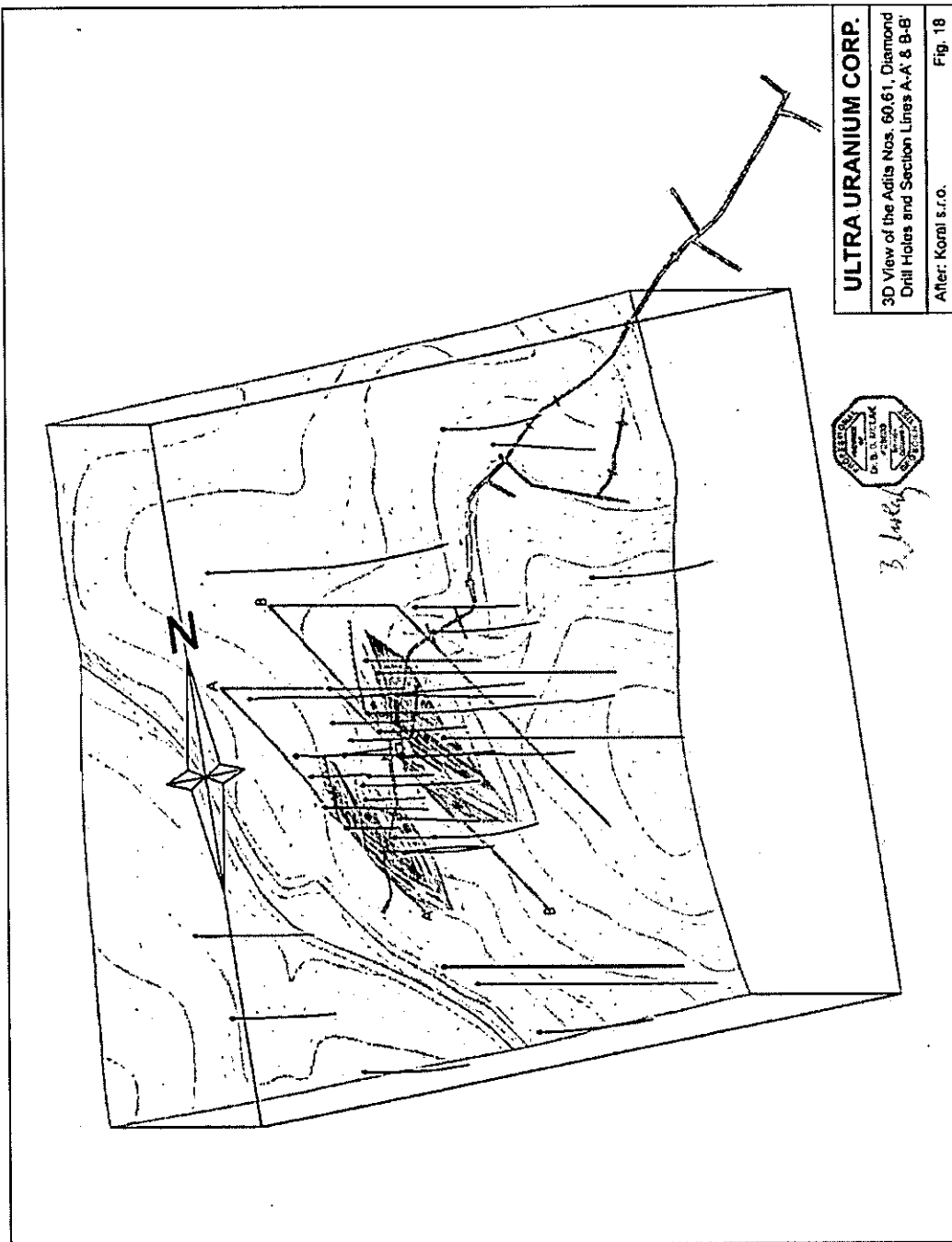
U.S. GEOLOGICAL SURVEY  
 DEPARTMENT OF THE INTERIOR

ULTRA URANIUM CORP.

3D View of the Adits Nos.  
60 & 61, Diamond Drill Holes  
and Sections A-A' and B-B'

After: Koral s.r.o.

Fig. 17



# ULTRA URANIUM CORP.

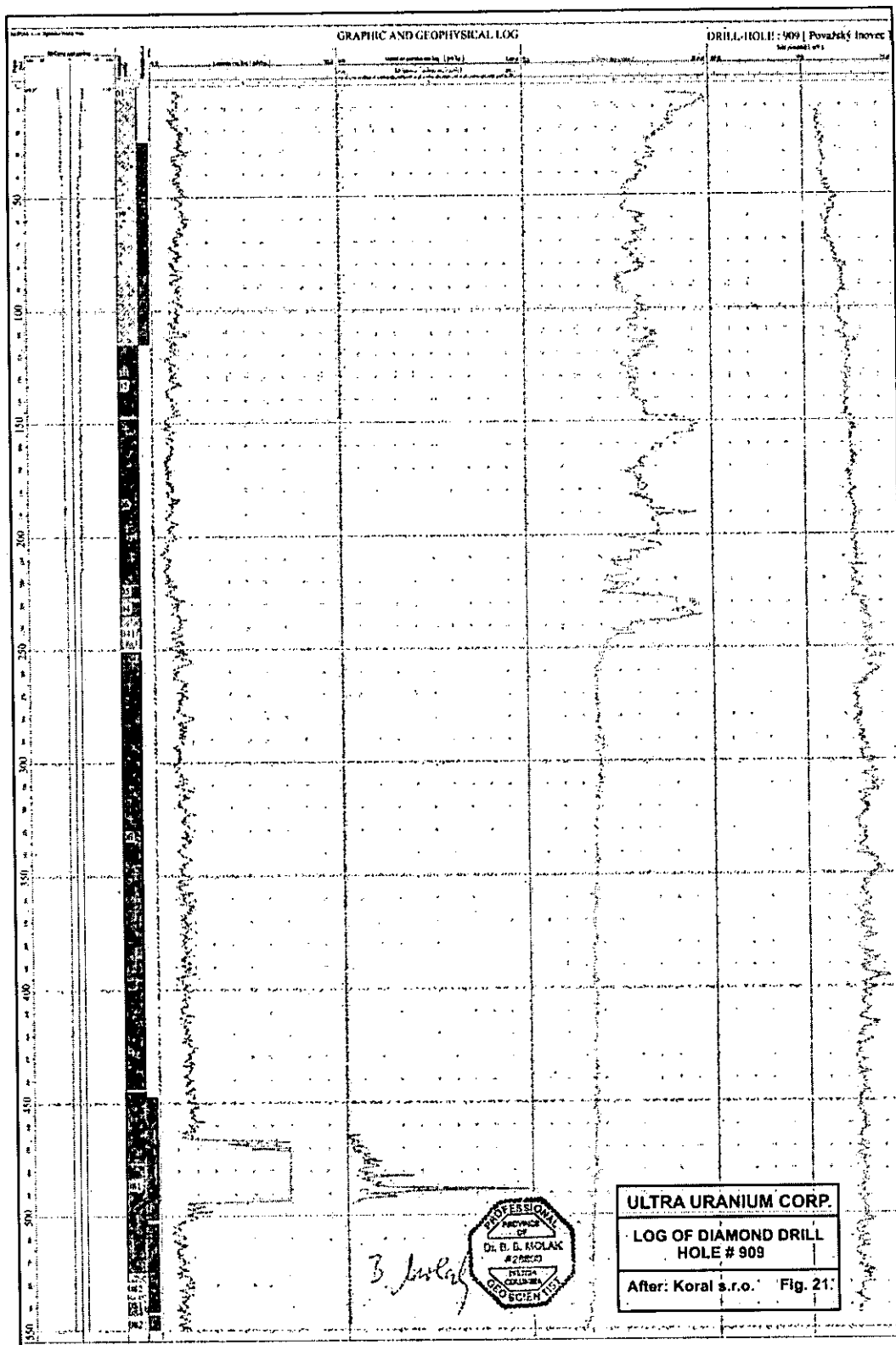
3D View of the Adits Nos. 60, 61, Diamond Drill Holes and Section Lines A-A' & B-B'

After: Komi s.r.o.

Fig. 18

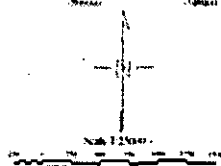






**Kalnica - Selec**

Concours intervals: 0.5 2 mmHg (mmHg) = calculated for bouguer density 2.67 g/cc



**Complete Bouguer Anomaly Map  
Kalnica-Selec License Area**

After: Koral s.r.o.

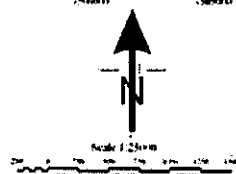
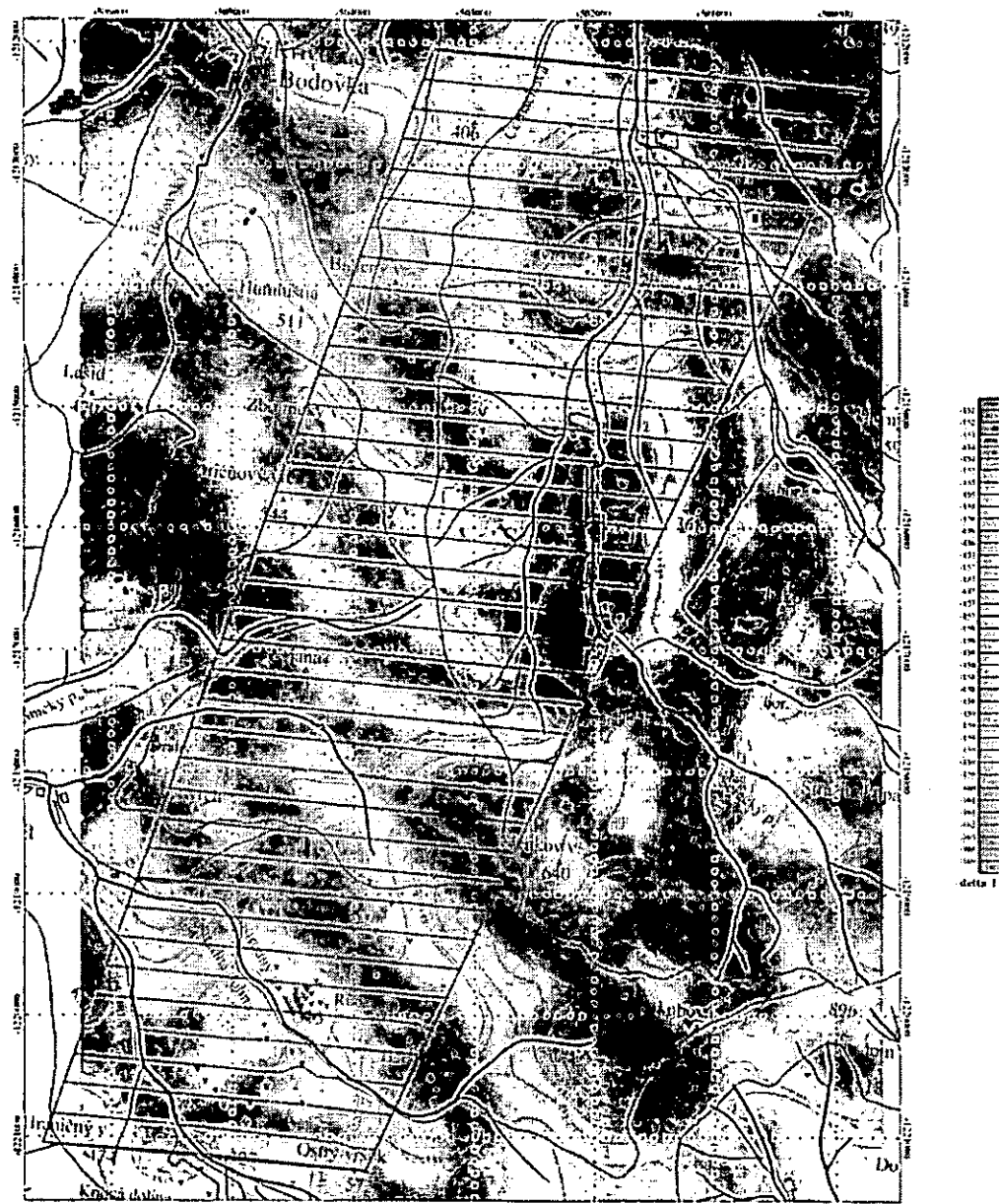
**Fig. 22**

[illegible]

NORAL 3.1.0 SpideAs Now Vee



## Prospect Kalnica - Selec



**Kalnica - Selec License Area**  
**Total Magnetic Intensity**

After: Koral s.r.o.

**Fig. 23**

1. **Introduction**

The purpose of this report is to provide a comprehensive overview of the current state of the art in the field of artificial intelligence (AI) and its applications. This document is intended for a general audience and aims to highlight the key developments and challenges in the field.

2. **Background**

Artificial intelligence (AI) refers to the simulation of human intelligence in machines that are programmed to think like humans and mimic their actions. The term can also be applied to machines that demonstrate human-like intelligence.

3. **Current State of the Art**

The field of AI has seen rapid growth in recent years, driven by advances in machine learning, deep learning, and natural language processing (NLP). These technologies have enabled significant breakthroughs in various applications, including image recognition, speech recognition, and autonomous systems.

4. **Applications**

AI has a wide range of applications across different industries. Some of the most prominent ones include:

- Healthcare:** AI is used for medical diagnosis, drug discovery, and patient care.
- Finance:** AI is used for fraud detection, risk management, and algorithmic trading.
- Manufacturing:** AI is used for quality control, predictive maintenance, and process optimization.
- Transportation:** AI is used for autonomous driving and traffic management.
- Education:** AI is used for personalized learning and educational assessment.

5. **Challenges**

Despite the significant progress, there are several challenges that need to be addressed for AI to reach its full potential. These include:

- Data Privacy:** Ensuring that AI systems are trained on high-quality, unbiased data while protecting individual privacy.
- Algorithmic Bias:** Addressing the issue of bias in AI algorithms, which can lead to unfair and discriminatory outcomes.
- Interpretability:** Making AI models more transparent and understandable, so that their decisions can be explained and trusted.
- Security:** Protecting AI systems from cyber threats and ensuring their robustness against adversarial attacks.

6. **Conclusion**

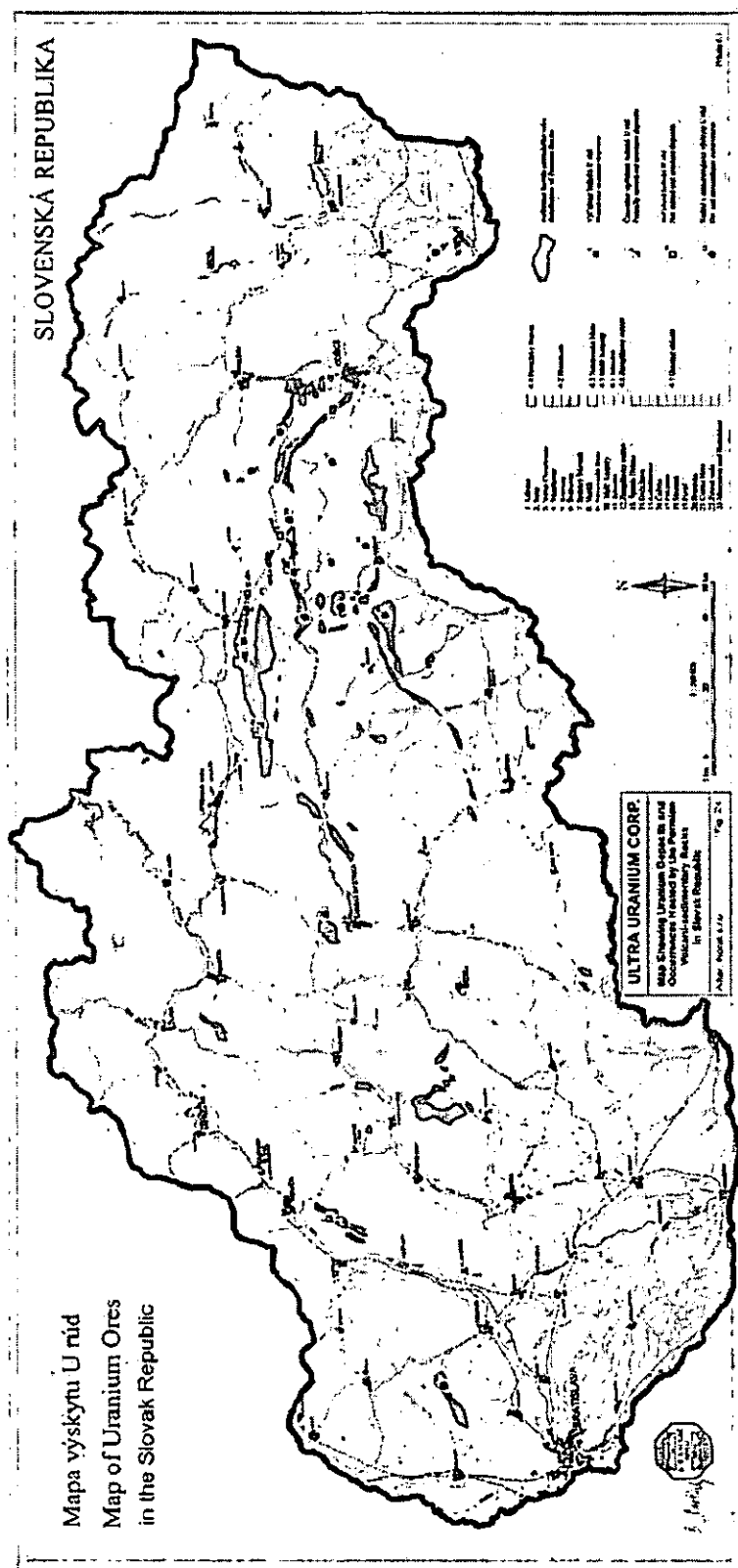
Artificial intelligence is a rapidly evolving field with immense potential. While there are challenges, the continued research and development in this area are expected to lead to even more groundbreaking applications and solutions in the future.



KORAL a r.o. Společná Nová Ves

Mapa výskytu U rúd  
Map of Uranium Ores  
in the Slovak Republic

SLOVENSKÁ REPUBLIKA





**ULTRA URANIUM CORP.**

**Fig. 25.A: The Crews in Selec village; B: GS 256  
Gamma Spectrometer**



**Deciduous Forest in the Kalnica - Selec License Area; GS 256 Spectrometer in the Foreground**

**ULTRA URANIUM CORP.**

**Fig. 26**



ULTRA URANIUM CORP.

Radiometric Survey at the  
Outcrop near the Adit 62

Fig. 27





ULTRA URANIUM CORP.

Radiometric Survey  
in the Selec Area

Fig. 28

END